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North Carolina VITAL STATISTICS

Volume 2-1997



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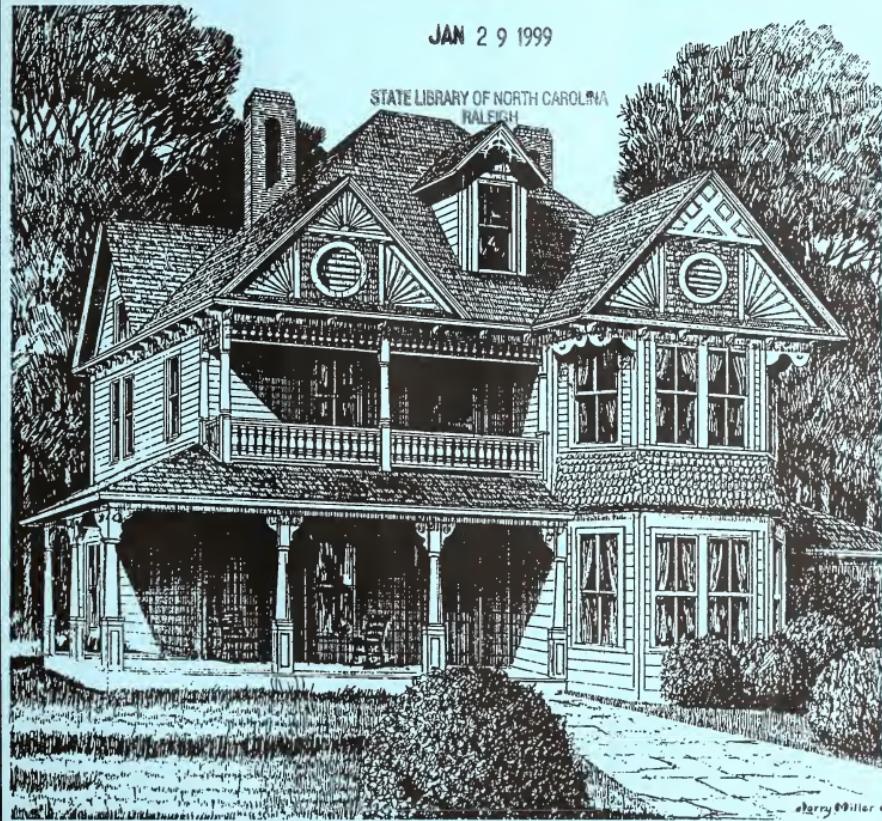
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LEADING CAUSES OF DEATH

Publications of the State Center for Health Statistics

North Carolina Health Statistics Pocket Guide (Biennial):

Data for the U.S., N.C., and N.C. counties are presented in tabular and narrative forms with more than 8,000 calculations depicting patterns of various needs indicators, as well as births, deaths, abortions, diseases, health care resources, and other data from state and national reporting systems and surveys. This composite of information, contained in a compact foldout, will serve the needs of many health data users.

North Carolina Vital Statistics, Volume 1: Population, Births, Deaths, Marriages, Divorces (Annual):

For the state and each Perinatal Care Region (PCR), county, and major incorporated city, one-page tables summarize annual and 5-year data by race and selected variables. Maps, graphs, and narrative describe geographical patterns and statewide trends.

North Carolina Vital Statistics, Volume 2: Leading Causes of Death (Annual):

For the state and counties, cause-specific annual and 5-year data are given in the form of numbers of deaths, unadjusted death rates, and age-adjusted death rates. For each cause, maps depict 5-year adjusted and unadjusted county rates. Infant mortality data are also tabulated and mapped.

Basic Automated Birth Yearbook, North Carolina Residents (Annual):

Known as the BABY BOOK, this statewide report is comprised of multiple cross-tabulations of various maternal and infant variables such as age, race, birth order, birth weight, and number of prenatal visits as well as medical conditions of the mother, the labor/delivery, and the newborn. Data for North Carolina counties are available on microfiche.

Detailed Mortality Statistics, North Carolina Residents (Annual):

This statewide report provides annual counts of deaths specific for detailed underlying cause of death (4 digits) and age-race-sex group. Data for counties are available on microfiche.

North Carolina Reported Pregnancies (Annual):

For the state, PCRs, and counties, annual estimates of pregnancy rates, live birth rates, abortion rates, and abortion fractions by age and race are followed by one-page tables displaying counts of pregnancies (abortions, live births, and fetal deaths) by race and age for total and unmarried women. Maps, graphs, and narrative describe geographical patterns and statewide trends.

Cancer Incidence in North Carolina, County-Specific Numbers (Annual):

Observed and expected numbers of newly diagnosed cancer cases for 26 cancer sites and total cancer are provided by county and gender. State and county tabulations of cases by race-sex and age are also provided.

North Carolina Cancer Facts and Figures (Biennial):

This collaborative report with the American Cancer Society is prepared specifically for use by the public. It contains tabular, graphic, and narrative materials regarding cancer in North Carolina. Information about cancer control activities and agencies in the state is also given.

Local Health Department Facility and Staffing Report (Biennial):

Facility-level data are compiled from health department surveys. Capacity of facilities, staffing levels, and expenditure data are provided.

SCHS Studies (Intermittent):

Studies on health topics of current interest are presented in newsletter form.

Statistical Brief (Intermittent):

These shorter reports on health topics are designed to provide quick information for health decision makers.

Statistical Primer (Intermittent):

Short tutorials on statistical methods are presented in newsletter form.

An Inventory of North Carolina Health Data (Intermittent):

This publication describes by subject-matter health data sets existing in public and nonpublic agencies. Included in the description are the data set's location, the data collection interval, the smallest unit of analysis, whether computerized, and the name of a contact person.

LEADING CAUSES OF DEATH

**North Carolina
Vital Statistics
1997-Volume 2**

**North Carolina Department of
Health and Human Services**

Division of Epidemiology

State Center for Health Statistics

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INTRODUCTION

North Carolina Vital Statistics, Volume 2: Leading Causes of Death describes North Carolina's general and cause-specific deaths at the state and county level. More than a dozen of North Carolina's leading causes of death are depicted in tables and maps. In addition, major site-specific cancers and total infant deaths are tabulated and mapped.

All users of this volume should be careful in the use of these data. Be sure to read "Interpretation of Death Rates" and "Caution About Use of Rates" located in the Technical Notes section of this volume.

A more exhaustive breakdown of cause-specific mortality by age, race, and sex is described in the companion volume, *North Carolina Detailed Mortality Statistics*. This and other publications (listed and described on the inside front cover of this publication) are available through the State Center for Health Statistics. If you would like copies of these publications you may contact the Center's Information Services Unit.

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Raleigh, North Carolina 27626-0538

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Caution: Many of the death rates presented in this volume are based on small numbers and should be interpreted with caution. See Technical Notes.

NORTH CAROLINA'S LEADING CAUSES OF DEATH



Figure 1: NC Deaths by Five Leading Causes, 1997

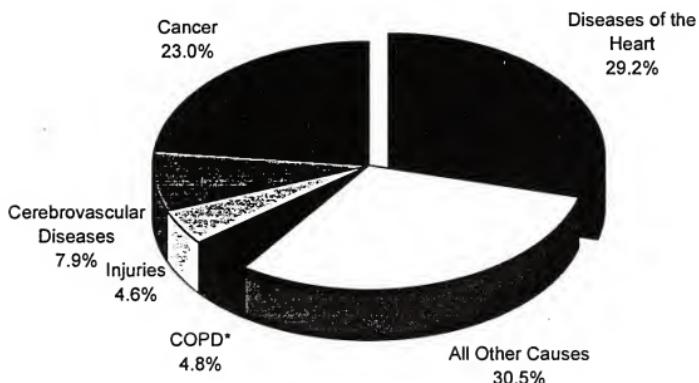
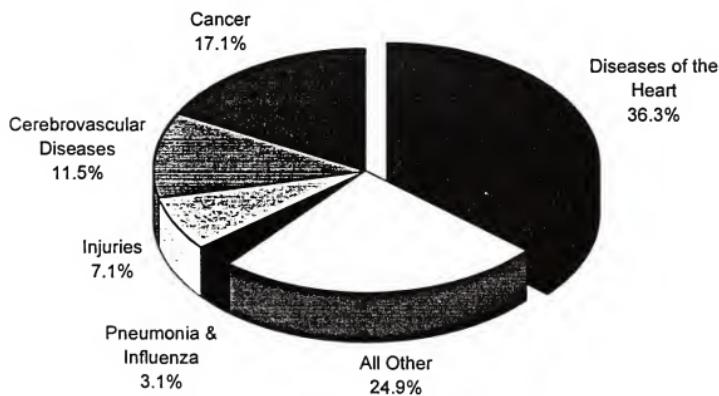


Figure 2: NC Deaths by Five Leading Causes, 1975



*Chronic obstructive pulmonary disease and allied conditions

Figure 3: NC Deaths by Five Leading Causes, 1955

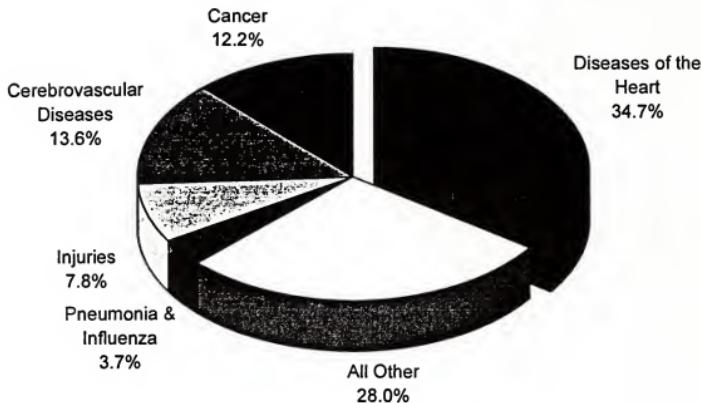
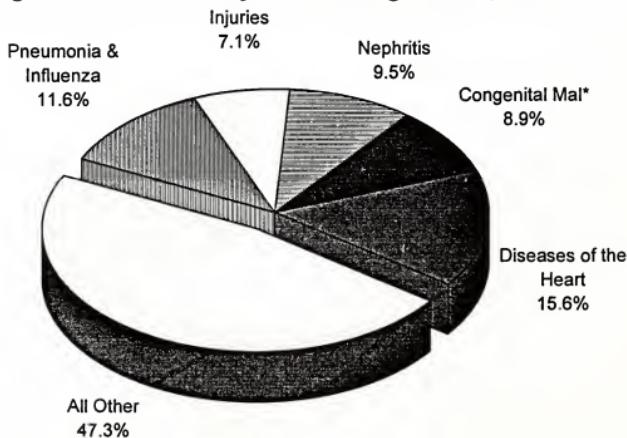


Figure 4: NC Deaths by Five Leading Causes, 1935



*Congenital Malformations

Note: Caution should be taken when comparing leading causes of death across time. The age distribution of the population has changed significantly since 1935. As the age distribution of a population changes over time, so do the leading causes of death. Observed increases in the proportion of deaths by heart disease and cancer are, in part, reflections of an increase in longevity of life since 1935. The association between age and leading causes of death become more apparent in the age-specific tables which follow.

Table 1
North Carolina Top 10 Leading Causes of Death
for Specified Age Groups, 1997*

All Ages			Ages <1		
Rank	Cause	Number	Rank	Cause	Number
1	Diseases of the heart.....	19,265	1	Originating in perinatal period ²	530
2	Cancer	15,150	2	Congenital anomalies ³	174
3	Cerebrovascular disease.....	5,220	3	Symptoms, signs, and ill-defined conditions (including SIDS)	114
4	COPD ¹	3,195	4	Homicide.....	16
5	Injuries	3,011		Injuries	16
	Motor vehicle injuries.....	1,530		Motor vehicle injuries.....	2
	Other	1,481		Other	14
6	Pneumonia & influenza.....	2,457		Other disease of nervous system.....	16
7	Diabetes mellitus	1,833	7	Pneumonia and Influenza.....	11
8	Suicide .....	.901	8	Viral diseases.....	9
9	Other diseases of arteries .....	.814	9	Certain other intestinal infections.....	8
10	Nephritis.....	.688		Septicemia	8
All other		13,346	All other.....		80
Total deaths.....		65,880	Total deaths.....		982

Ages 1-4			Ages 5-14		
Rank	Cause	Number	Rank	Cause	Number
1	Injuries	56	1	Injuries	127
	Motor vehicle injuries.....	30		Motor vehicle injuries.....	86
	Other	26		Other	41
2	Congenital anomalies ³	18	2	Cancer	29
3	Homicide	12	3	Homicide	13
4	Diseases of the heart.....	11	4	Congenital anomalies ³	11
5	Symptoms, signs, and ill-defined conditions (including SIDS)	8		Suicide	11
6	Pneumonia and influenza	6	6	Diseases of the heart.....	9
7	Meningitis.....	5	7	AIDS	6
8	AIDS.....	2		Symptoms, signs, and ill-defined conditions	6
	Benign Neoplasms.....	2	9	Anemias	4
	Cerebrovascular disease.....	2		Pneumonia and influenza	4
	COPD ¹	2	All other.....		43
	Malignant Neoplasms	2	Total deaths.....		263
	Other infectious/parasitic diseases....	2			
	Originating in perinatal period ²	2			
All other		19			
Total deaths.....		149			

*Leading causes of death are generated from a list of 43 causes of death. For deaths under one year of age, a list of 27 causes of death was used. See Appendices B and C respectively for the ICD-9 codes for these lists of causes. These are standard cause-of-death categories developed by the National Center for Health Statistics to promote comparability in analyses of mortality.

¹Chronic obstructive pulmonary disease and allied conditions.

²Certain conditions originating in the perinatal period.

³Birth defects and other related conditions.

Table 1 (cont'd)
North Carolina Top 10 Leading Causes of Death
for Specified Age Groups, 1997

Ages 15-24

Rank	Cause	Number
1	Injuries	439
	Motor vehicle injuries.....	362
	Other	77
2	Homicide	160
3	Suicide	123
4	Cancer	39
5	Diseases of the heart.....	29
6	Congenital anomalies ²	16
7	Symptoms, signs, and ill-defined conditions.....	14
8	Cerebrovascular disease	8
9	AIDS.....	7
10	Other external causes.....	6
All other		87
Total deaths.....		928

Ages 25-44

Rank	Cause	Number
1	Injuries	829
	Motor vehicle injuries.....	479
	Other	350
2	Cancer	649
3	Diseases of the heart.....	526
4	Suicide	362
5	AIDS.....	336
6	Homicide	321
7	Cerebrovascular diseases	113
8	Chronic liver disease	99
9	Diabetes mellitus	81
10	Symptoms, signs, and ill-defined conditions.....	69
All other		708
Total deaths.....		4,091

Ages 45-64

Rank	Cause	Number
1	Cancer	4,111
2	Diseases of the heart.....	3,263
3	Injuries	552
	Motor vehicle injuries.....	288
	Other	264
4	Cerebrovascular diseases	531
5	COPD ¹	449
	Diabetes mellitus	449
7	Chronic liver disease	279
8	Suicide	247
9	Pneumonia & influenza.....	218
10	Septicemia	119
All other		1,791
Total deaths.....		12,009

Ages 65+

Rank	Cause	Number
1	Diseases of the heart	15,407
2	Cancer	10,315
3	Cerebrovascular diseases	4,554
4	COPD ¹	2,694
5	Pneumonia & influenza.....	2,160
6	Diabetes mellitus	1,303
7	Injuries	992
	Motor vehicle injuries.....	709
	Other	283
8	Other diseases of the heart	689
9	Nephritis	580
10	Septicemia	500
All other		8,264
Total deaths.....		47,458

¹Chronic obstructive pulmonary disease and allied conditions.

²Birth defects and other related conditions.

Table 2
North Carolina Top 10 Leading Causes of Death
for Racial Groups, 1997

White			Black		
Rank	Cause	Number	Rank	Cause	Number
1	Diseases of the heart.....	15,175	1	Diseases of the heart.....	3,890
2	Cancer	11,746	2	Cancer	3,258
3	Cerebrovascular disease.....	4,030	3	Cerebrovascular disease.....	1,139
4	COPD ¹	2,786	4	Injuries .....	.692
5	Injuries	2,243		Motor vehicle injuries.....	383
	Motor vehicle injuries.....	1,103		Other.....	309
	Other.....	1,140	5	Diabetes mellitus	614
6	Pneumonia & influenza.....	2,004	6	Pneumonia & influenza.....	439
7	Diabetes mellitus	1,183	7	COPD ¹ .....	.387
8	Suicide	781	8	AIDS.....	.364
9	Other diseases of the heart	665	9	Homicide.....	.344
10	Chronic liver disease	490	10	Originating in perinatal period ² .....	.264
All other .....	.....	9,392	All other.....	.....	3,244
Total deaths.....	.....	50,495	Total deaths.....	.....	14,635

American Indian

Rank	Cause	Number
1	Diseases of the heart	175
2	Cancer.....	100
3	Injuries.....	59
	Motor vehicle injuries.....	37
	Other	22
4	Cerebrovascular disease	39
5	Diabetes mellitus.....	32
6	Homicide	24
7	COPD ¹	19
8	Originating in perinatal period ²	18
9	Pneumonia and influenza	12
10	Suicide.....	11
All other.....	.....	102
Total deaths.....	.....	591

Note: Caution should be taken when comparing the number of deaths across racial groupings. Population size varies considerably from one racial group to another. The number of deaths for each group is to a large extent a reflection of that population size.

¹Chronic obstructive pulmonary disease and allied conditions.

²Certain conditions originating in the perinatal period.

**STATE AND
COUNTY MORTALITY
TABLES AND FIGURES
FOR 1993-1997**

Table 3
Mortality Statistics Summary for 1997
All North Carolina Residents*

Cause of Death	Number of Deaths 1997	Death Rate 1997
All Causes	65,880	8.9
Diseases of Heart.....	19,265	259.2
Cerebrovascular Disease.....	5,220	70.2
Atherosclerosis.....	414	5.6
Cancer	15,150	203.9
Lip, Oral Cavity, and Pharynx	221	3.0
Stomach	303	4.1
Colon, Rectum, and Anus	1,458	19.6
Liver.....	293	3.9
Pancreas	748	10.1
Larynx.....	106	1.4
Trachea, Bronchus, and Lung.....	4,636	62.4
Malignant Melanoma.....	199	2.7
Bladder	301	4.1
Brain Tumors.....	391	5.3
Non-Hodgkins Lymphoma.....	599	8.1
Leukemia	513	6.9
Acquired Immune Deficiency Syndrome.....	480	6.5
Septicemia.....	655	8.8
Diabetes Mellitus	1,833	24.7
Pneumonia and Influenza	2,457	33.1
Chronic Obstructive Pulmonary Disease and Allied Conditions.....	3,195	43.0
Chronic Liver Disease and Cirrhosis.....	663	8.9
Nephritis, Nephrotic Syndrome, and Nephrosis.....	688	9.3
Unintentional Motor Vehicle Injuries	1,530	20.6
All Other Unintentional Injuries and Adverse Effects	1,481	19.9
Suicide.....	901	12.1
Homicide.....	671	9.0

Table 4
Sex-Specific Mortality Statistics Summary for 1997
North Carolina Male and Female Residents*

Cause of Death	Number of Deaths 1997	Death Rate 1997
Cancer		
Female Breast.....	1,217	31.8
Cervix Uteri.....	133	3.5
Ovary and Other Uterine Adnexa.....	387	10.1
Prostate	940	26.1

Note: The death rates in Table 4 cannot be compared to those in Table 3 because the denominators are sex-specific. Therefore, in ranking the causes of death—for example, in ranking the leading cancer sites—one must use the observed numbers of deaths.

*See Appendix A for a listing of Cause of Death codes.

TABLE - 5
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
GENERAL MORTALITY

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	65880	8.9	322521	9.0	8.5
COUNTIES					
1 ALAMANCE	1208	10.1	5930	10.2	8.2
2 ALEXANDER	261	8.4	1236	8.2	8.0
3 ALLEGHANY	111	11.5	637	13.2	8.1
4 ANSON	284	11.9	1392	11.7	9.3
5 ASHE	266	11.3	1415	12.2	8.1
6 AVERY	171	11.1	866	11.4	8.7
7 BEAUFORT	513	11.8	2633	12.2	9.7
8 BERTIE	263	13.0	1269	12.4	10.5
9 BLADEN	342	11.3	1818	12.2	10.1
10 BRUNSWICK	642	9.8	2956	9.7	8.3
11 BUNCOMBE	2047	10.7	10164	10.8	7.9
12 BURKE	749	9.0	3698	9.1	7.9
13 CABARRUS	1006	8.6	4820	8.7	7.9
14 CALDWELL	710	9.5	3351	9.1	8.3
15 CAMDEN	61	9.7	317	10.1	8.9
16 CARTERET	613	10.4	2816	9.8	8.2
17 CASWELL	219	9.9	1122	10.5	8.4
18 CATAWBA	1188	9.2	5619	8.9	8.4
19 CHATHAM	430	9.5	2082	9.7	7.8
20 CHEROKEE	260	11.6	1272	11.7	7.6
21 CHOWAN	182	12.8	887	12.6	8.7
22 CLAY	90	11.2	470	12.2	7.6
23 CLEVELAND	928	10.2	4671	10.5	8.9
24 COLUMBUS	569	11.0	2867	11.2	9.7
25 CRAVEN	750	8.5	3623	8.4	8.6
26 CUMBERLAND	1771	6.0	8866	6.0	9.1
27 CURRITUCK	155	9.4	757	9.6	9.2
28 DARE	210	7.7	1004	7.8	8.0
29 DAVIDSON	1257	9.0	5948	8.7	8.1
30 DAVIE	306	9.8	1444	9.6	7.8
31 DUPLIN	541	12.3	2521	11.8	10.1
32 DURHAM	1700	8.6	8256	8.5	9.2
33 EDGECOMBE	595	10.7	3142	11.2	10.6
34 FORSYTH	2582	9.0	12774	9.1	8.3
35 FRANKLIN	395	9.1	1985	9.6	8.8
36 GASTON	1742	9.7	8802	9.9	9.4
37 GATES	129	13.0	577	11.8	10.2
38 GRAHAM	102	13.6	465	12.5	9.0
39 GRANVILLE	381	8.9	2063	10.0	9.4
40 GREENE	156	8.8	755	9.0	8.2
41 GUILFORD	3345	8.7	16444	8.8	8.2
42 HALIFAX	642	11.5	3323	11.7	10.0
43 HARNETT	687	8.4	3427	8.9	8.9
44 HAYWOOD	602	11.7	2886	11.6	7.3
45 HENDERSON	1014	12.8	4903	12.8	7.3

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

Note: Death rates in this table are per 1,000 population while cause-specific death rates are per 100,000 population.

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
GENERAL MORTALITY, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	247	11.3	1321	11.8	9.8
47 HOKE	199	6.9	1001	7.4	8.6
48 HYDE	70	13.3	343	13.0	9.6
49 IREDELL	979	9.0	4937	9.5	8.4
50 JACKSON	271	9.3	1330	9.3	7.5
51 JOHNSTON	881	8.5	4424	9.3	8.9
52 JONES	99	11.0	555	11.8	10.1
53 LEE	441	9.1	2165	9.4	8.5
54 LENOIR	691	11.7	3342	11.3	9.8
55 LINCOLN	491	8.5	2374	8.5	8.3
56 McDOWELL	385	9.8	1885	10.0	7.9
57 MACON	389	14.1	1701	12.9	7.2
58 MADISON	204	11.1	1024	11.5	8.0
59 MARTIN	262	10.2	1404	10.9	9.1
60 MECKLENBURG	4146	6.8	20622	7.1	8.3
61 MITCHELL	216	14.7	942	12.9	8.4
62 MONTGOMERY	229	9.4	1128	9.4	8.5
63 MOORE	789	11.4	3762	11.3	7.2
64 NASH	787	9.0	3988	9.5	9.0
65 NEW HANOVER	1276	8.7	6041	8.7	8.0
66 NORTHHAMPTON	285	13.7	1311	12.7	9.4
67 ONSLOW	694	4.7	3363	4.5	9.0
68 ORANGE	609	5.7	2989	5.7	7.1
69 PAMlico	153	12.8	676	11.4	8.1
70 PASQUOTANK	338	9.8	1737	10.3	9.0
71 PENDER	358	9.6	1699	9.8	8.5
72 PERQUIMANS	150	13.8	668	12.5	8.7
73 PERSON	345	10.5	1708	10.7	8.8
74 PITTS	1021	8.2	4817	8.1	9.4
75 POLK	226	13.8	1103	13.9	7.1
76 RANDOLPH	1030	8.5	4831	8.3	7.8
77 RICHMOND	515	11.3	2644	11.6	10.2
78 ROBESON	1114	9.9	5367	9.7	10.5
79 ROCKINGHAM	965	10.8	4766	10.8	8.8
80 ROWAN	1352	11.0	6386	10.7	8.5
81 RUTHERFORD	697	11.7	3435	11.7	8.9
82 SAMPSON	573	10.9	2859	11.3	9.5
83 SCOTLAND	389	11.1	1777	10.2	10.6
84 STANLY	580	10.5	2828	10.5	8.6
85 STOKES	372	8.7	1790	8.7	8.3
86 SURRY	711	10.6	3500	10.7	8.3
87 SWAIN	140	11.7	737	12.6	9.7
88 TRANSYLVANIA	322	11.6	1480	10.9	6.9
89 TYRRELL	49	13.3	233	12.4	8.6
90 UNION	769	7.2	3580	7.3	8.4
91 VANCE	451	11.0	2330	11.6	10.8
92 WAKE	3037	5.5	14530	5.6	7.5
93 WARREN	220	12.1	1042	11.6	8.1
94 WASHINGTON	142	10.7	764	11.2	9.5
95 WATAUGA	263	6.4	1276	6.4	6.6
96 WAYNE	985	8.7	4775	8.6	9.3
97 WILKES	607	9.6	2841	9.2	7.8
98 WILSON	719	10.5	3736	11.0	10.1
99 YADKIN	313	8.9	1569	9.3	7.3
100 YANCEY	159	9.7	812	10.1	6.8

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

General Mortality

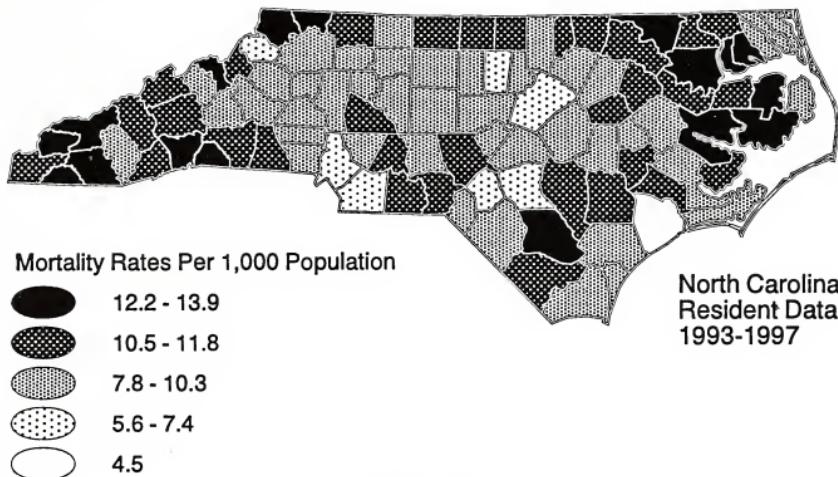


Figure 5.A

General Mortality

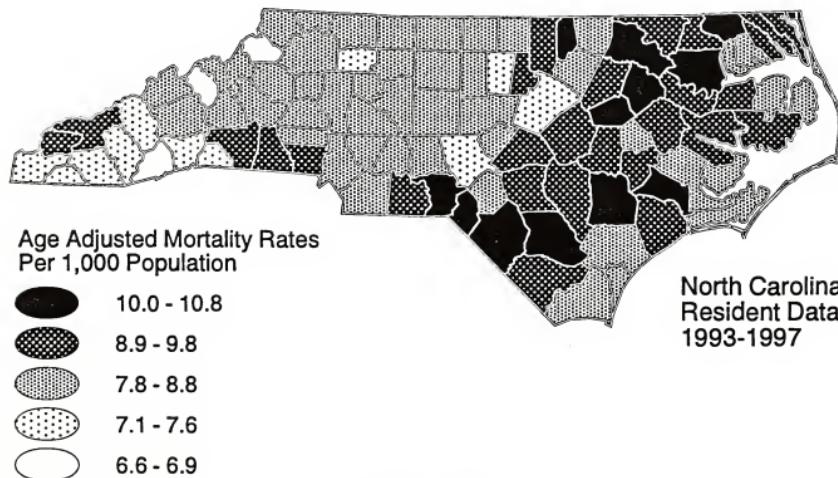


Figure 5.B

TABLE - 6
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
DISEASES OF THE HEART

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	19265	259.2	96967	269.6	251.6

COUNTIES

1 ALAMANCE	364	303.8	1747	301.7	232.6
2 ALEXANDER	80	257.4	398	264.5	255.9
3 ALLEGHANY	28	289.2	199	413.2	239.3
4 ANSON	96	402.4	466	390.2	294.2
5 ASHE	76	322.1	427	369.2	230.3
6 AVERY	51	329.9	318	418.7	303.1
7 BEAUFORT	165	380.2	881	407.5	310.4
8 BERTIE	61	301.3	368	359.3	295.2
9 BLADEN	118	389.3	561	376.7	303.6
10 BRUNSWICK	213	326.7	921	303.0	255.3
11 BUNCOMBE	576	301.4	2995	318.8	221.7
12 BURKE	241	289.9	1161	286.7	244.0
13 CABARRUS	315	270.4	1562	282.5	250.8
14 CALDWELL	235	314.5	1112	302.0	270.8
15 CAMDEN	12	190.2	80	255.9	222.0
16 CARTERET	201	340.3	896	311.6	256.1
17 CASWELL	63	285.6	343	319.8	247.6
18 CATAWBA	325	250.9	1576	250.1	234.0
19 CHATHAM	116	257.0	620	287.7	223.8
20 CHEROKEE	74	330.1	432	397.0	245.4
21 CHOWAN	57	400.9	265	376.9	255.9
22 CLAY	26	322.3	146	377.5	223.0
23 CLEVELAND	302	333.1	1650	370.7	306.6
24 COLUMBUS	213	410.1	1013	394.9	336.7
25 CRAVEN	230	260.0	1056	246.0	251.4
26 CUMBERLAND	484	163.9	2456	167.5	274.7
27 CURRITUCK	44	265.5	199	251.7	241.4
28 DARE	63	230.0	307	238.8	245.2
29 DAVIDSON	396	282.0	1957	286.7	265.7
30 DAVIE	109	349.4	487	325.1	254.7
31 DUPLIN	152	344.8	738	345.1	287.8
32 DURHAM	462	233.7	2181	225.6	244.6
33 EDGECOMBE	167	301.5	919	326.8	307.2
34 FORSYTH	719	250.4	3659	261.4	231.1
35 FRANKLIN	106	243.8	565	271.9	244.8
36 GASTON	534	296.5	2883	322.8	303.6
37 GATES	52	524.5	197	402.8	341.3
38 GRAHAM	37	493.1	128	343.6	237.1
39 GRANVILLE	116	271.0	618	299.1	278.4
40 GREENE	40	226.6	219	260.5	233.8
41 GUILFORD	848	221.3	4504	242.3	222.8
42 HALIFAX	218	390.4	1111	391.1	323.7
43 HARNETT	196	240.9	1050	272.4	271.7
44 HAYWOOD	210	409.6	982	393.0	234.3
45 HENDERSON	310	391.7	1505	394.3	210.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
DISEASES OF THE HEART, CONTD

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	73	333.1	398	356.5	280.8
47 HOKE	49	169.7	270	198.9	241.4
48 HYDE	31	587.1	141	535.2	372.2
49 IREDELL	300	274.6	1516	292.4	252.1
50 JACKSON	66	226.5	399	278.2	215.5
51 JOHNSTON	274	265.6	1403	293.5	279.0
52 JONES	26	289.3	156	333.0	274.8
53 LEE	127	262.6	647	280.7	250.7
54 LENOIR	220	372.6	1014	344.1	288.4
55 LINCOLN	180	310.9	788	283.0	273.7
56 MCDOVELL	122	309.5	590	313.8	239.3
57 MACON	117	422.9	545	414.3	208.5
58 MADISON	64	349.2	292	327.5	218.7
59 MARTIN	85	331.7	431	334.0	270.7
60 MECKLENBURG	1148	188.6	5509	190.7	226.4
61 MITCHELL	76	516.0	311	425.4	259.2
62 MONTGOMERY	74	302.4	362	302.1	268.0
63 MOORE	237	341.0	1145	344.7	206.0
64 NASH	223	256.0	1228	291.8	274.2
65 NEW HANOVER	377	257.2	1864	268.0	244.4
66 NORTHAMPTON	77	370.2	388	374.7	267.2
67 ONSLOW	182	123.5	955	128.8	287.1
68 ORANGE	152	141.7	805	153.0	195.1
69 PAMLICO	43	359.1	184	310.6	207.2
70 PASQUOTANK	96	278.1	550	327.7	276.4
71 PENDER	104	279.5	524	301.2	257.2
72 PERQUIMANS	37	339.4	197	368.7	241.2
73 PERSON	108	328.1	513	320.9	257.9
74 PITTS	269	216.2	1257	212.5	249.9
75 POLK	68	414.8	324	409.7	186.7
76 RANDOLPH	317	260.8	1571	270.6	249.2
77 RICHMOND	173	378.9	887	390.7	331.1
78 ROBESON	338	299.9	1604	289.4	315.4
79 ROCKINGHAM	249	279.3	1410	319.6	253.4
80 ROWAN	433	352.7	2057	346.1	264.5
81 RUTHERFORD	212	356.9	1130	383.6	282.2
82 SAMPSON	145	275.4	831	327.4	266.7
83 SCOTLAND	118	337.1	590	339.4	353.5
84 STANLY	189	342.8	948	350.8	279.9
85 STOKES	93	217.0	532	259.2	244.8
86 SURRY	225	336.7	1132	347.6	260.4
87 SWAIN	44	366.9	249	427.0	309.9
88 TRANSYLVANIA	108	387.9	497	364.4	218.4
89 TYRRELL	11	299.6	75	398.4	265.3
90 UNION	238	224.3	1164	236.6	281.6
91 VANCE	119	290.4	688	341.9	312.3
92 WAKE	792	142.2	3925	151.6	212.2
93 WARREN	53	292.2	293	325.8	214.8
94 WASHINGTON	40	300.8	286	418.6	342.0
95 WATAUGA	76	186.0	432	216.8	219.6
96 WAYNE	282	249.2	1448	261.5	286.2
97 WILKES	179	283.7	871	280.9	233.8
98 WILSON	188	273.6	1074	316.4	287.1
99 YADKIN	82	233.0	464	275.3	209.0
100 YANCEY	55	336.4	245	304.4	197.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Diseases of the Heart

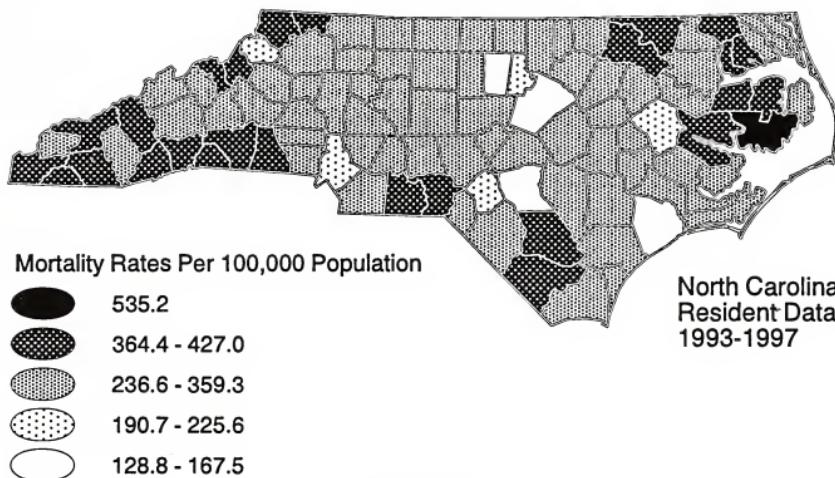


Figure 6.A

Diseases of the Heart

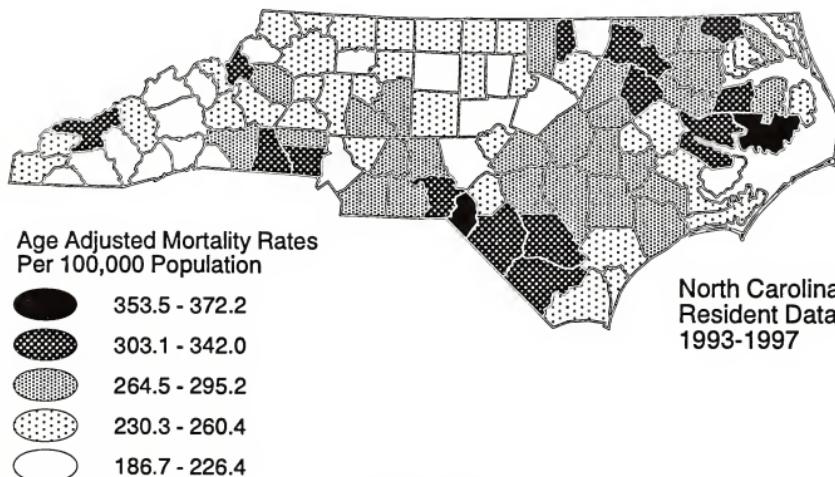


Figure 6.B

TABLE - 7
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CEREBROVASCULAR DISEASE

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	5220	70.2	25715	71.5	65.8

COUNTIES

1 ALAMANCE	113	94.3	528	91.2	68.3
2 ALEXANDER	19	61.1	73	48.5	47.4
3 ALLEGHANY	8	82.6	53	110.1	56.4
4 ANSON	27	113.2	153	128.1	94.0
5 ASHE	34	144.1	113	97.7	57.9
6 AVERY	8	51.7	34	44.8	32.0
7 BEAUFORT	39	89.9	204	94.4	71.8
8 BERTIE	11	54.3	89	86.9	71.6
9 BLADEN	33	108.9	193	129.6	101.6
10 BRUNSWICK	46	70.6	184	60.5	52.4
11 BUNCOMBE	158	82.7	807	85.9	57.1
12 BURKE	47	56.5	228	56.3	47.7
13 CABARRUS	80	68.7	311	56.3	49.7
14 CALDWELL	56	74.9	276	75.0	66.6
15 CAMDEN	3	47.6	23	73.6	64.5
16 CARTERET	30	50.8	183	63.6	52.6
17 CASWELL	13	58.9	87	81.1	62.1
18 CATAWBA	108	83.4	480	76.2	70.7
19 CHATHAM	38	84.2	173	80.3	60.5
20 CHEROKEE	20	89.2	64	58.8	34.7
21 CHOWAN	13	91.4	76	108.1	69.0
22 CLAY	5	62.0	25	64.6	36.2
23 CLEVELAND	72	79.4	374	84.0	68.9
24 COLUMBUS	42	80.9	204	79.5	67.4
25 CRAVEN	50	56.5	271	63.1	64.7
26 CUMBERLAND	101	34.2	510	34.8	58.7
27 CURRITUCK	9	54.3	44	55.7	53.7
28 DARE	16	58.4	70	54.4	57.2
29 DAVIDSON	108	76.9	484	70.9	65.7
30 DAVIE	19	60.9	106	70.8	53.9
31 DUPLIN	58	131.6	265	123.9	100.6
32 DURHAM	99	50.1	535	55.3	58.4
33 EDGECOMBE	50	90.3	288	102.4	95.3
34 FORSYTH	213	74.2	1032	73.7	63.7
35 FRANKLIN	44	101.2	168	80.8	70.4
36 GASTON	94	52.2	566	63.4	59.0
37 GATES	9	90.8	43	87.9	75.0
38 GRAHAM	6	80.0	26	69.8	45.4
39 GRANVILLE	33	77.1	155	75.0	69.7
40 GREENE	16	90.6	66	78.5	69.4
41 GUILFORD	285	74.4	1453	78.2	69.6
42 HALIFAX	46	82.4	289	101.7	82.0
43 HARNETT	62	76.2	225	58.4	57.7
44 HAYWOOD	35	68.3	188	75.2	44.0
45 HENDERSON	85	107.4	386	101.1	50.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CEREBROVASCULAR DISEASE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	24	109.5	113	101.2	79.3
47 HOKE	7	24.2	60	44.2	54.2
48 HYDE	5	94.7	28	106.3	73.9
49 IREDELL	83	76.0	423	81.6	66.6
50 JACKSON	17	58.3	71	49.5	37.6
51 JOHNSTON	75	72.7	361	75.5	71.6
52 JONES	11	122.4	60	128.1	106.0
53 LEE	26	53.8	138	59.9	53.0
54 LENOIR	65	110.1	345	117.1	97.5
55 LINCOLN	38	65.6	187	67.2	65.1
56 McDOWELL	36	91.3	157	83.5	60.9
57 MACON	21	75.9	110	83.6	40.9
58 MADISON	11	60.0	85	95.3	58.8
59 MARTIN	13	50.7	93	72.1	58.5
60 MECKLENBURG	270	44.4	1539	53.3	62.9
61 MITCHELL	19	129.0	65	88.9	50.0
62 MONTGOMERY	16	65.4	67	55.9	48.3
63 MOORE	84	120.9	385	115.9	65.5
64 NASH	66	75.8	325	77.2	72.0
65 NEW HANOVER	115	78.4	540	77.6	70.6
66 NORTHAMPTON	33	158.7	137	132.3	91.2
67 ONSLOW	48	32.6	191	25.8	56.4
68 ORANGE	50	46.6	246	46.7	58.8
69 PAMlico	8	66.8	50	84.4	55.1
70 PASQUOTANK	32	92.7	129	76.9	62.1
71 PENDER	39	104.8	148	85.1	73.0
72 PERQUIMANS	14	128.4	70	131.0	81.6
73 PERSON	32	97.2	183	114.5	87.6
74 PITTS	82	65.9	426	72.0	84.2
75 POLK	23	140.3	90	113.8	47.5
76 RANDOLPH	74	60.9	383	66.0	60.4
77 RICHMOND	33	72.3	207	91.2	76.4
78 ROBESON	88	78.1	423	76.3	83.4
79 ROCKINGHAM	100	112.2	466	105.6	80.5
80 ROWAN	110	89.6	553	93.1	68.8
81 RUTHERFORD	60	101.0	313	106.2	75.1
82 SAMPSON	61	115.9	288	113.5	90.0
83 SCOTLAND	36	102.8	139	80.0	82.0
84 STANLY	60	108.6	306	113.2	87.5
85 STOKES	45	105.0	168	81.8	75.6
86 SURRY	54	80.8	281	86.3	63.2
87 SWAIN	5	41.7	38	65.2	46.5
88 TRANSYLVANIA	30	107.7	114	83.6	47.8
89 TYRRELL	2	54.5	17	90.3	55.6
90 UNION	57	53.7	245	49.8	59.7
91 VANCE	45	109.8	234	116.3	103.9
92 WAKE	240	43.1	1187	45.9	64.3
93 WARREN	24	132.3	110	122.3	76.3
94 WASHINGTON	8	60.2	39	57.1	46.4
95 WATAUGA	33	80.8	92	46.2	45.0
96 WAYNE	64	74.2	383	69.2	76.3
97 WILKES	47	74.5	264	85.2	69.1
98 WILSON	59	85.9	353	104.0	93.6
99 YADKIN	28	79.5	113	67.0	49.1
100 YANCEY	13	79.5	72	89.4	54.6

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cerebrovascular Disease

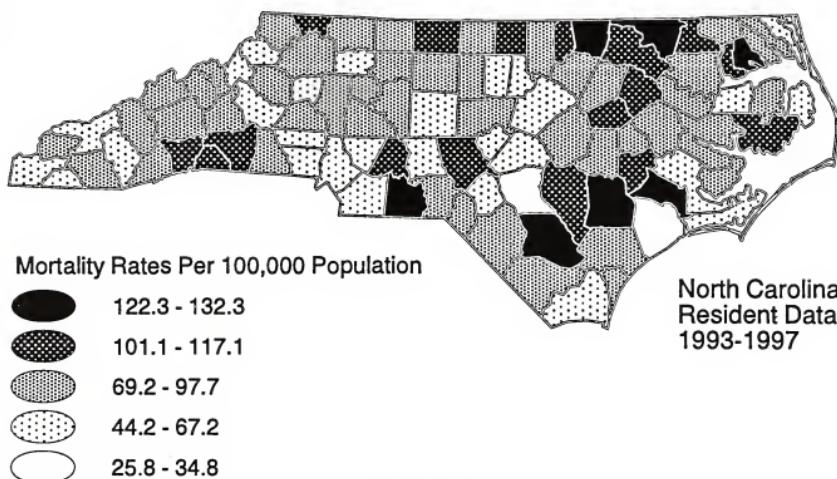


Figure 7.A

Cerebrovascular Disease

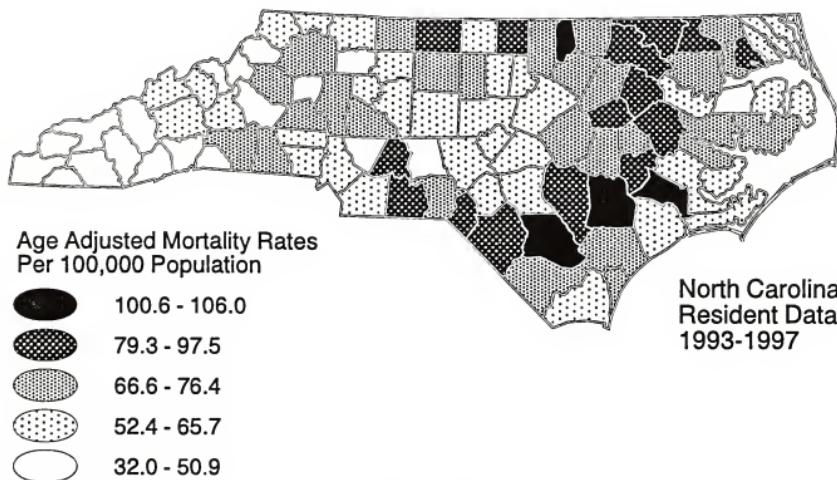


Figure 7.B

TABLE - 8
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
ATHEROSCLEROSIS

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	414	5.6	2054	5.7	5.2

COUNTIES

1 ALAMANCE	5	4.2	48	8.3	5.9
2 ALEXANDER	0	0.0	0	0.0	0.0
3 ALLEGHENY	0	0.0	0	0.0	0.0
4 ANSON	0	0.0	1	0.8	0.6
5 ASHE	0	0.0	5	4.3	2.2
6 AVERY	0	0.0	3	3.9	2.6
7 BEAUFORT	1	2.3	3	1.4	1.0
8 BERTIE	4	19.8	17	16.6	12.9
9 BLADEF	2	6.6	18	12.1	9.3
10 BRUNSWICK	10	15.3	30	9.9	8.9
11 BUNCOMBE	24	12.6	100	10.6	6.7
12 BURKE	4	4.8	13	3.2	2.7
13 CABARRUS	3	2.6	17	3.1	2.6
14 CALDWELL	3	4.0	13	3.5	3.1
15 CAMDEN	0	0.0	4	12.8	11.8
16 CARTERET	1	1.7	6	2.1	1.7
17 CASWELL	1	4.5	6	5.6	4.2
18 CATAWBA	3	2.3	24	3.8	3.5
19 CHATHAM	4	8.9	17	7.9	5.7
20 CHEROKEE	0	0.0	2	1.8	0.9
21 CHOWAN	5	35.2	23	32.7	18.5
22 CLAY	3	37.2	7	18.1	10.5
23 CLEVELAND	6	6.6	24	5.4	4.4
24 COLUMBUS	0	0.0	1	0.4	0.3
25 CRAVEN	5	5.7	22	5.1	5.3
26 CUMBERLAND	13	4.4	48	3.3	5.8
27 CURRITUCK	5	30.2	19	24.0	23.8
28 DARE	1	3.7	7	5.4	5.7
29 DAVIDSON	0	0.0	11	1.6	1.5
30 DAVIE	2	6.4	6	4.0	3.1
31 DUPLIN	8	18.1	29	13.6	10.7
32 DURHAM	8	4.0	60	6.2	6.4
33 EDGECOMBE	3	5.4	17	6.0	5.5
34 FORSYTH	5	1.7	53	3.8	3.3
35 FRANKLIN	2	4.6	8	3.8	3.5
36 GASTON	4	2.2	25	2.8	2.5
37 GATES	2	20.2	8	16.4	13.8
38 GRAHAM	0	0.0	5	13.4	8.4
39 GRANVILLE	1	2.3	6	2.9	2.7
40 GREENE	10	56.7	32	38.1	32.8
41 GUILFORD	45	11.7	170	9.1	7.9
42 HALIFAX	9	16.1	29	10.2	7.9
43 HARNETT	2	2.5	15	3.9	3.8
44 HAYWOOD	0	0.0	12	4.8	2.7
45 HENDERSON	2	2.5	11	2.9	1.3

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
ATHEROSCLEROSIS, CONTD

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	3	13.7	12	10.7	7.9
47 HOKE	0	0.0	4	2.9	3.6
48 HYDE	0	0.0	0	0.0	0.0
49 IREDELL	3	2.7	20	3.9	3.3
50 JACKSON	2	6.9	8	5.6	4.3
51 JOHNSTON	11	10.7	39	8.2	7.8
52 JONES	1	11.1	5	10.7	6.7
53 LEE	3	6.2	11	4.8	4.2
54 LENOIR	20	33.9	86	29.2	24.0
55 LINCOLN	3	5.2	13	4.7	4.5
56 McDOWELL	1	2.5	11	5.9	4.3
57 MACON	0	0.0	3	2.3	1.2
58 MADISON	0	0.0	3	3.4	2.1
59 MARTIN	0	0.0	11	8.5	6.8
60 MECKLENBURG	17	2.8	86	3.0	3.5
61 MITCHELL	0	0.0	0	0.0	0.0
62 MONTGOMERY	2	8.2	5	4.2	3.7
63 MOORE	2	2.9	13	3.9	2.1
64 NASH	7	8.0	30	7.1	6.6
65 NEW HANOVER	17	11.6	53	7.6	6.9
66 NORTHAMPTON	4	19.2	15	14.5	9.6
67 ONSLOW	3	2.0	17	2.3	5.7
68 ORANGE	3	2.8	16	3.0	3.7
69 PAMLICO	0	0.0	1	1.7	1.1
70 PASQUOTANK	4	11.6	21	12.5	9.7
71 PENDER	1	2.7	7	4.0	3.3
72 PERQUIMANS	2	18.3	11	20.6	12.8
73 PERSON	4	12.2	16	10.0	7.5
74 PITT	2	1.6	18	3.0	3.5
75 POLK	1	6.1	2	2.5	0.8
76 RANDOLPH	4	3.3	16	2.8	2.5
77 RICHMOND	2	4.4	12	5.3	4.5
78 ROBESON	6	5.3	31	5.6	6.1
79 ROCKINGHAM	4	4.5	16	3.6	2.8
80 ROWAN	10	8.1	76	12.8	8.9
81 RUTHERFORD	15	25.3	75	25.5	16.6
82 SAMPSON	1	1.9	13	5.1	4.0
83 SCOTLAND	2	5.7	4	2.3	2.4
84 STANLY	7	12.7	36	13.3	10.0
85 STOKES	4	9.3	33	16.1	14.3
86 SURRY	4	6.0	36	11.1	7.6
87 SWAIN	0	0.0	3	5.1	4.0
88 TRANSYLVANIA	2	7.2	8	5.9	3.4
89 TYRRELL	1	27.2	1	5.3	3.1
90 UNION	3	2.8	10	2.0	2.5
91 VANCE	3	7.3	20	9.9	6.6
92 WAKE	4	0.7	46	1.8	2.6
93 WARREN	1	5.5	4	4.4	2.7
94 WASHINGTON	0	0.0	1	1.5	1.3
95 WATAUGA	0	0.0	3	1.5	1.3
96 WAYNE	9	8.0	42	7.6	8.6
97 WILKES	1	1.6	5	1.6	1.3
98 WILSON	7	10.2	37	10.9	9.8
99 YADKIN	2	5.7	10	5.9	4.4
100 YANCEY	0	0.0	4	5.0	2.6

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Atherosclerosis

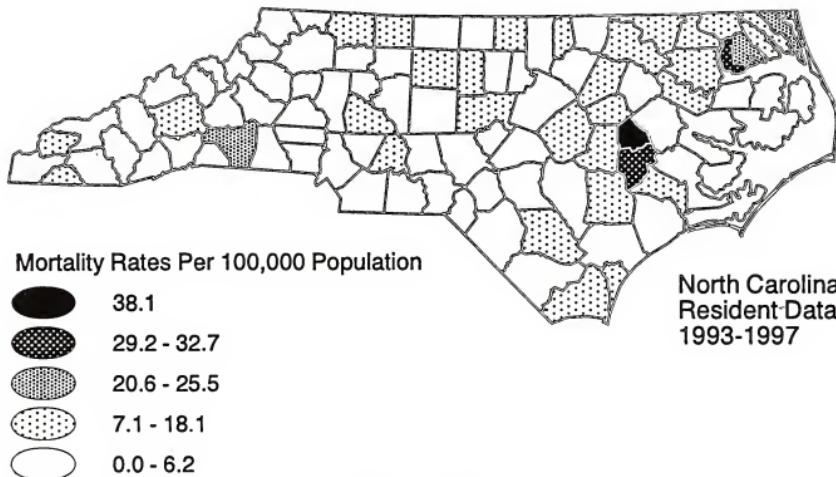


Figure 8.A

Atherosclerosis

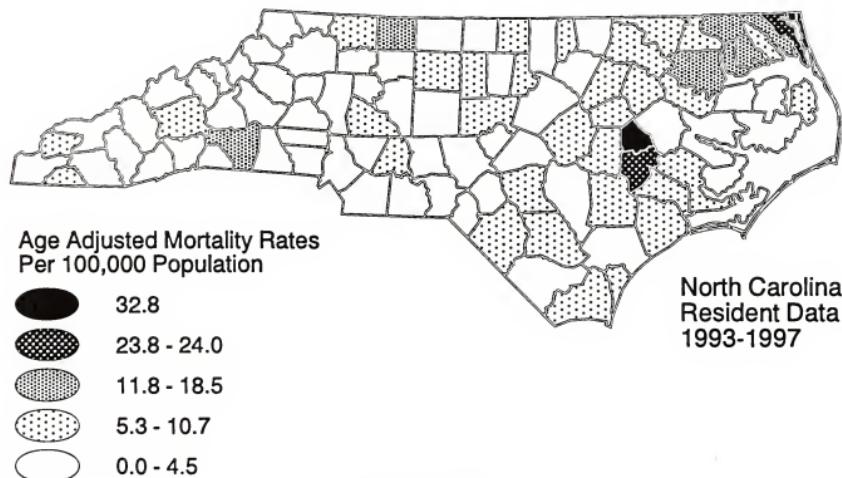


Figure 8.B

TABLE - 9
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CANCER - ALL SITES

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	15150	203.9	74180	206.3	197.4

COUNTIES

1 ALAMANCE	277	231.2	1390	240.1	194.0
2 ALEXANDER	55	177.0	273	181.5	174.1
3 ALLEGHANY	24	247.9	149	309.4	198.2
4 ANSON	64	268.3	295	247.0	199.5
5 ASHE	64	271.2	317	274.1	186.7
6 AVERY	40	258.7	193	254.1	201.1
7 BEAUFORT	117	269.6	577	266.9	214.0
8 BERTIE	72	355.6	309	301.7	255.3
9 BLADEF	56	184.7	368	247.1	204.2
10 BRUNSWICK	167	256.1	777	255.6	200.8
11 BUNCOMBE	441	230.7	2284	243.1	184.7
12 BURKE	172	206.9	852	210.4	182.9
13 CABARRUS	242	207.7	1138	205.9	188.8
14 CALDWELL	164	219.5	762	206.9	187.4
15 CAMDEN	20	317.1	100	319.9	268.1
16 CARTERET	155	262.5	754	262.2	213.6
17 CASWELL	62	281.1	278	259.2	207.8
18 CATAWBA	287	221.6	1341	212.8	199.8
19 CHATHAM	96	212.7	473	219.5	180.2
20 CHEROKEE	60	267.7	288	264.7	172.7
21 CHOWAN	43	302.4	201	285.9	204.7
22 CLAY	22	272.7	124	320.6	199.5
23 CLEVELAND	174	191.9	934	209.9	181.0
24 COLUMBUS	110	211.8	621	242.1	208.0
25 CRAVEN	180	203.4	901	209.9	213.7
26 CUMBERLAND	410	138.9	2114	144.2	219.7
27 CURRITUCK	43	259.5	223	282.1	265.9
28 DARE	57	208.1	273	212.4	206.7
29 DAVIDSON	297	211.5	1389	203.5	188.6
30 DAVIE	70	224.4	304	202.9	167.4
31 DUPLIN	121	274.5	563	263.2	225.7
32 DURHAM	391	197.8	1943	201.0	228.5
33 EDGECOMBE	139	250.9	671	238.6	230.8
34 FORSYTH	596	207.5	2952	210.9	196.6
35 FRANKLIN	88	202.4	436	209.8	198.6
36 GASTON	427	237.1	2038	228.2	218.1
37 GATES	29	292.5	130	265.8	227.4
38 GRAHAM	23	306.5	120	322.2	230.9
39 GRANVILLE	68	158.9	448	216.8	206.7
40 GREENE	41	232.3	185	220.1	199.6
41 GUILFORD	807	210.6	3888	209.1	199.3
42 HALIFAX	149	266.8	705	248.2	215.3
43 HARNETT	165	202.8	810	210.1	211.7
44 HAYWOOD	133	259.4	647	258.9	168.9
45 HENDERSON	229	289.3	1178	308.6	182.8

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CANCER - ALL SITES, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	58	264.6	305	273.2	230.8
47 HOKE	43	148.9	230	169.4	201.1
48 HYDE	13	246.2	67	254.3	193.8
49 IREDELL	211	193.1	1142	220.3	193.9
50 JACKSON	72	247.1	300	209.2	176.2
51 JOHNSTON	202	195.8	1013	211.9	201.7
52 JONES	29	322.7	116	247.6	211.3
53 LEE	110	227.4	539	233.8	207.1
54 LENOIR	140	237.1	730	247.7	211.6
55 LINCOLN	99	171.0	519	186.4	179.6
56 MCDOWELL	85	215.6	433	230.3	185.5
57 MACON	90	325.3	400	304.1	173.9
58 MADISON	41	223.7	222	249.0	186.6
59 MARTIN	55	214.6	309	239.5	201.0
60 MECKLENBURG	934	153.5	4725	163.6	195.6
61 MITCHELL	36	244.4	210	287.2	197.2
62 MONTGOMERY	55	224.7	241	201.1	183.1
63 MOORE	207	297.8	991	298.3	188.3
64 NASH	179	205.5	874	207.7	197.5
65 NEW HANOVER	304	207.4	1485	213.5	196.9
66 NORTHAMPTON	75	360.6	306	295.5	217.2
67 ONSLOW	163	110.6	775	104.5	218.9
68 ORANGE	155	144.5	742	141.0	181.8
69 PAMLICO	39	325.7	173	292.0	203.5
70 PASQUOTANK	80	231.8	396	235.9	213.2
71 PENDER	78	209.6	414	237.9	198.9
72 PERQUIMANS	32	293.6	162	303.2	212.6
73 PERSON	80	243.0	376	235.2	200.9
74 PITTS	248	199.4	1082	183.0	216.5
75 POLK	57	347.7	256	323.7	173.7
76 RANDOLPH	256	210.6	1136	195.7	183.5
77 RICHMOND	98	214.6	527	232.1	201.8
78 ROBESON	211	187.2	1124	202.8	221.2
79 ROCKINGHAM	243	272.6	1108	251.1	207.4
80 ROWAN	289	235.4	1416	238.3	195.0
81 RUTHERFORD	146	245.8	702	238.3	188.7
82 SAMPSON	138	262.1	605	238.4	202.0
83 SCOTLAND	90	257.1	369	212.3	222.2
84 STANLY	131	237.6	640	236.8	199.8
85 STOKES	82	191.4	403	196.3	188.6
86 SURRY	152	227.4	763	234.3	186.2
87 SWAIN	35	291.8	158	270.9	211.8
88 TRANSYLVANIA	70	251.4	352	258.1	167.8
89 TYRRELL	13	354.0	57	302.8	213.6
90 UNION	196	184.7	850	172.8	197.9
91 VANCE	92	224.5	500	248.4	235.0
92 WAKE	719	129.1	3471	134.1	182.8
93 WARREN	61	336.3	248	275.7	192.9
94 WASHINGTON	28	210.6	196	286.9	242.8
95 WATAUGA	69	168.9	304	152.6	161.6
96 WAYNE	220	194.4	1055	190.5	203.3
97 WILKES	145	229.8	643	207.4	176.6
98 WILSON	149	216.8	765	225.4	206.3
99 YADKIN	64	181.8	355	210.6	167.6
100 YANCEY	36	220.2	184	228.6	159.5

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cancer - All Sites

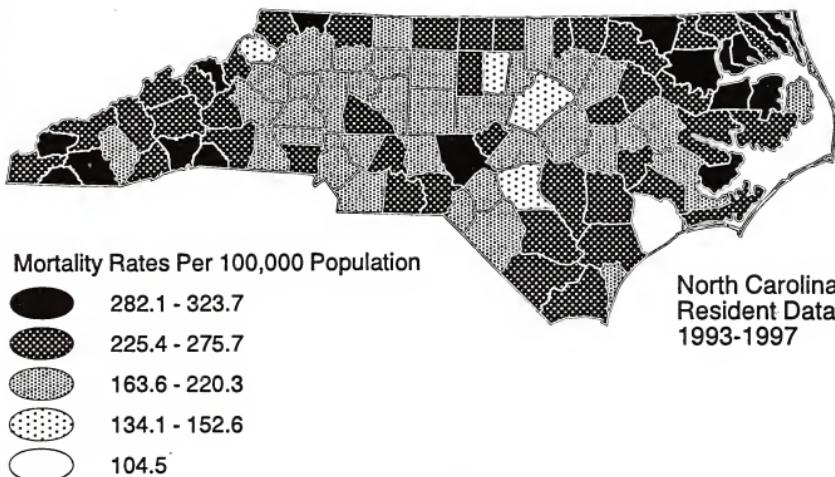


Figure 9.A

Cancer - All Sites

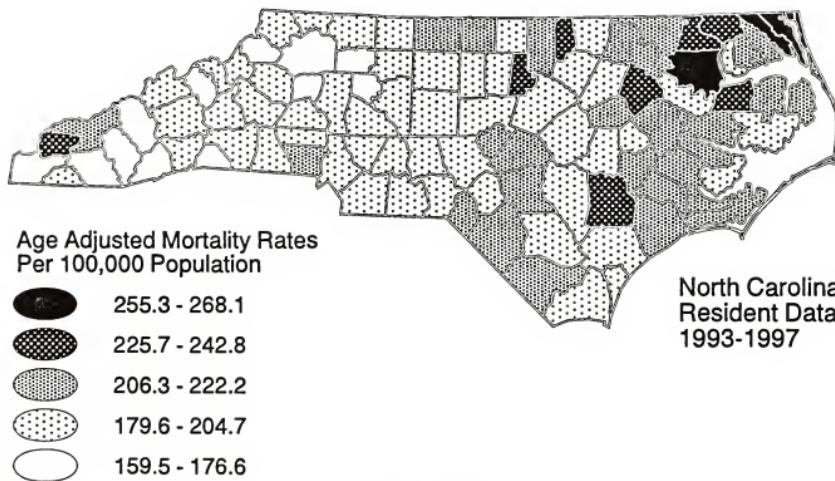


Figure 9.B

TABLE - 10
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CANCER - COLON, RECTAL, AND ANUS

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	1458	19.6	7430	20.7	19.6
COUNTIES					
1 ALAMANCE	29	24.2	146	25.2	19.8
2 ALEXANDER	5	16.1	25	16.6	15.7
3 ALLEGHANY	5	51.6	16	33.2	18.7
4 ANSON	6	25.2	40	33.5	26.3
5 ASHE	6	25.4	26	22.5	13.9
6 AVERY	1	6.5	13	17.1	12.9
7 BEAUFORT	9	20.7	47	21.7	16.8
8 BERTIE	12	59.3	32	31.2	25.7*
9 BLADEN	9	29.7	45	30.2	24.5
10 BRUNSWICK	19	29.1	90	29.6	23.1
11 BUNCOMBE	39	20.4	226	24.1	17.6
12 BURKE	14	16.8	80	19.8	17.2
13 CABARRUS	16	13.7	113	20.4	18.6
14 CALDWELL	19	25.4	73	19.8	17.9
15 CAMDEN	0	0.0	8	25.6	22.2
16 CARTERET	14	23.7	67	23.3	18.8
17 CASWELL	10	45.3	33	30.8	24.3
18 CATAVBA	23	17.8	158	25.1	23.4
19 CHATHAM	8	17.7	56	26.0	21.0
20 CHEROKEE	4	17.8	26	23.9	15.3
21 CHOWAN	6	42.2	30	42.7	30.5
22 CLAY	1	12.4	12	31.0	19.2
23 CLEVELAND	16	17.7	78	17.5	14.9
24 COLUMBUS	7	13.5	47	18.3	15.5
25 CRAVEN	25	28.3	102	23.8	24.3
26 CUMBERLAND	33	11.2	160	10.9	17.2
27 CURRITUCK	5	30.2	21	26.6	25.7
28 DARE	4	14.6	22	17.1	16.9
29 DAVIDSON	19	13.5	126	18.5	17.1
30 DAVIE	5	16.0	38	25.4	20.3
31 DUPLIN	12	27.2	59	27.6	23.4
32 DURHAM	42	21.2	200	20.7	22.9
33 EDGECOMBE	16	28.9	73	26.0	24.6
34 FORSYTH	46	16.0	294	21.0	19.4
35 FRANKLIN	13	29.9	50	24.1	22.5
36 GASTON	33	18.3	193	21.6	20.5
37 GATES	4	40.3	22	45.0	38.4
38 GRAHAM	3	40.0	9	24.2	16.0
39 GRANVILLE	8	18.7	42	20.3	19.4
40 GREENE	4	22.7	14	16.7	15.2
41 GUILFORD	66	17.2	386	20.8	19.4
42 HALIFAX	15	26.9	74	26.1	22.2
43 HARNETT	25	30.7	97	25.2	25.2
44 HAYWOOD	6	11.7	58	23.2	14.9
45 HENDERSON	22	27.8	124	32.5	18.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CANCER - COLON, RECTAL, AND ANUS, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	6	27.4	35	31.3	25.2
47 HOKE	6	20.8	28	20.6	25.2
48 HYDE	1	18.9	9	34.2	25.0
49 IREDELL	23	21.1	119	23.0	20.0
50 JACKSON	5	17.2	24	16.7	13.1
51 JOHNSTON	18	17.4	98	20.5	19.3
52 JONES	3	33.4	16	34.2	28.7
53 LEE	15	31.0	62	26.9	23.8
54 LENOIR	19	32.2	99	33.6	28.5
55 LINCOLN	15	25.9	59	21.2	20.3
56 MCDOWELL	8	20.3	44	23.4	18.8
57 MACON	10	36.1	43	32.7	17.5
58 MADISON	1	5.5	15	16.8	12.0
59 MARTIN	7	27.3	38	29.4	25.3
60 MECKLENBURG	88	14.5	449	15.5	18.7
61 MITCHELL	3	20.4	18	24.6	16.1
62 MONTGOMERY	7	28.6	23	19.2	16.6
63 MOORE	23	33.1	129	38.8	24.0
64 NASH	18	20.7	85	20.2	19.1
65 NEW HANOVER	26	17.7	128	18.4	16.9
66 NORTHAMPTON	9	43.3	33	31.9	23.0
67 ONSLOW	16	10.9	78	10.5	23.2
68 ORANGE	15	14.0	74	14.1	17.8
69 PAMLICO	3	25.1	15	25.3	17.7
70 PASQUOTANK	10	29.0	54	32.2	27.4
71 PENDER	3	8.1	35	20.1	16.7
72 PERQUIMANS	2	18.3	15	28.1	18.7
73 PERSON	7	21.3	53	33.2	27.2
74 PITTS	20	16.1	109	18.4	21.9
75 POLK	6	36.6	31	39.2	19.1
76 RANDOLPH	22	18.1	99	17.1	15.9
77 RICHMOND	14	30.7	67	29.5	25.4
78 ROBESON	19	16.9	106	19.1	20.6
79 ROCKINGHAM	21	23.6	106	24.0	19.5
80 ROWAN	29	23.6	135	22.7	18.1
81 RUTHERFORD	19	32.0	72	24.4	19.0
82 SAMPSON	14	26.6	64	25.2	21.0
83 SCOTLAND	14	40.0	46	26.5	27.8
84 STANLY	17	30.8	77	28.5	23.2
85 STOKES	7	16.3	32	15.6	14.8
86 SURRY	16	23.9	74	22.7	17.7
87 SWAIN	2	16.7	12	20.6	16.1
88 TRANSYLVANIA	7	25.1	32	23.5	15.1
89 TYRRELL	4	108.9	9	47.8	35.1
90 UNION	15	14.1	83	16.9	19.6
91 VANCE	9	22.0	45	22.4	20.7
92 WAKE	74	13.3	337	13.0	17.6
93 WARREN	8	44.1	26	26.9	20.4
94 WASHINGTON	2	15.0	18	26.3	22.3
95 WATAUGA	6	14.7	32	16.1	16.7
96 WAYNE	25	22.1	93	16.8	18.2
97 WILKES	11	17.4	56	18.1	15.4
98 WILSON	14	20.4	67	19.7	18.0
99 YADKIN	8	22.7	50	29.7	23.2
100 YANCEY	4	24.5	23	28.6	19.5

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cancer - Colon, Rectum and Anus

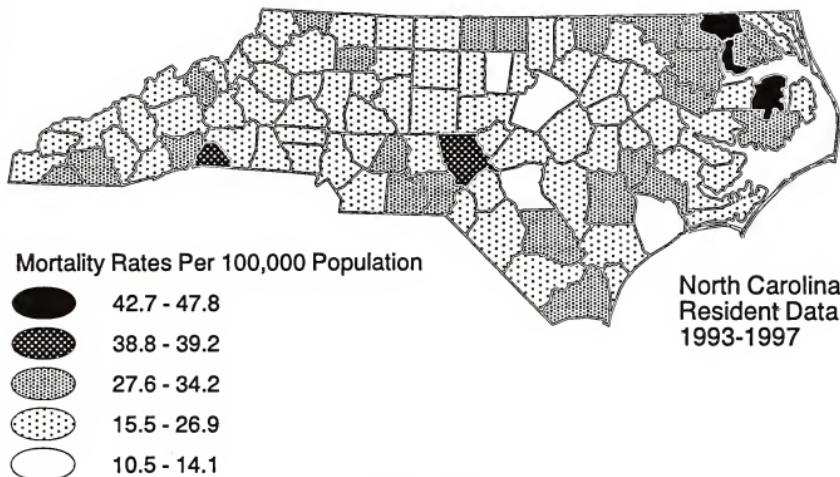


Figure 10.A

Cancer - Colon, Rectum and Anus

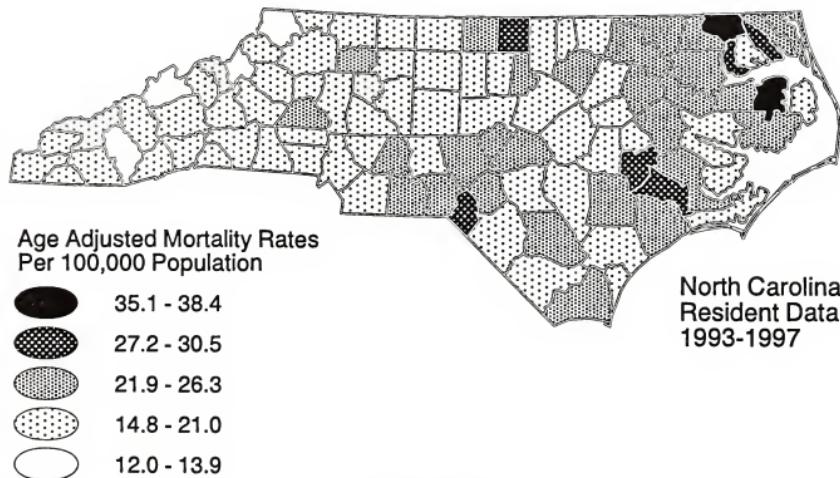


Figure 10.B

TABLE -11
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CANCER - TRACHEA, BRONCHUS, AND LUNG

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	4636	62.4	22413	62.3	60.3

COUNTIES

1 ALAMANCE	84	70.1	442	76.3	62.5
2 ALEXANDER	12	38.6	80	53.2	51.0
3 ALLEGHANY	3	31.0	41	85.1	57.9
4 ANSON	12	50.3	70	58.6	47.8
5 ASHE	17	72.0	95	82.1	57.2
6 AVERY	12	77.6	62	81.6	65.1
7 BEAUFORT	48	110.6	215	99.4	80.4
8 BERTIE	19	93.8	91	88.9	77.2
9 BLADEN	17	56.1	111	74.5	62.5
10 BRUNSWICK	58	89.0	264	86.6	65.6
11 BUNCOMBE	118	61.7	667	71.0	55.1
12 BURKE	60	72.2	264	65.2	56.5
13 CABARRUS	69	59.2	329	59.5	55.4
14 CALDWELL	58	77.6	250	67.9	61.6
15 CAMDEN	7	111.0	31	99.2	82.0
16 CARTERET	48	81.3	237	82.4	66.2
17 CASWELL	18	81.6	77	71.8	58.4
18 CATAWBA	96	74.1	419	66.5	62.5
19 CHATHAM	23	51.0	124	57.5	48.0
20 CHEROKEE	17	75.8	95	88.2	58.9
21 CHOWAN	16	112.5	64	91.0	65.0
22 CLAY	5	62.0	28	72.4	47.6
23 CLEVELAND	58	64.0	273	61.3	53.2
24 COLUMBUS	44	84.7	198	77.2	66.3
25 CRAVEN	57	64.4	268	62.4	63.1
26 CUMBERLAND	127	43.0	719	49.0	74.4
27 CURRITUCK	15	90.5	84	106.3	98.8
28 DARE	19	69.4	101	78.6	76.0
29 DAVIDSON	116	82.6	466	68.3	63.5
30 DAVIE	25	80.1	84	56.1	47.0
31 DUPLIN	41	93.0	176	82.3	71.4
32 DURHAM	109	55.1	583	60.3	71.5
33 EDGECOMBE	45	81.2	199	70.8	69.2
34 FORSYTH	180	62.7	883	63.1	60.2
35 FRANKLIN	32	73.6	133	64.0	61.2
36 GASTON	148	82.2	676	75.7	73.1
37 GATES	9	90.8	33	67.5	57.4
38 GRAHAM	6	80.0	41	110.1	81.6
39 GRANVILLE	23	53.7	141	68.2	66.1
40 GREENE	12	68.0	60	71.4	64.9
41 GUILFORD	236	61.6	1145	61.6	59.7
42 HALIFAX	49	87.7	196	69.0	60.4
43 HARNETT	41	50.4	222	57.6	58.5
44 HAYWOOD	45	87.8	209	83.6	54.7
45 HENDERSON	69	87.2	344	90.1	54.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CANCER - TRACHEA, BRONCHUS, AND LUNG, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	23	104.9	102	91.4	78.3
47 HOKE	13	45.0	64	47.1	56.2
48 HYDE	4	75.8	21	79.7	61.7
49 IREDELL	66	60.4	342	66.0	58.4
50 JACKSON	20	68.6	93	64.9	54.6
51 JOHNSTON	62	60.1	343	71.8	68.6
52 JONES	8	89.0	38	81.1	68.7
53 LEE	37	76.5	160	69.4	60.8
54 LENOIR	39	66.1	220	74.7	63.4
55 LINCOLN	37	63.9	160	57.5	55.7
56 McDOWELL	26	65.9	137	72.9	59.1
57 MACON	33	119.3	128	97.3	54.9
58 MADISON	14	76.4	59	66.2	51.2
59 MARTIN	12	46.8	96	74.4	63.1
60 MECKLENBURG	259	42.6	1315	45.5	55.7
61 MITCHELL	15	101.8	70	95.7	65.4
62 MONTGOMERY	19	77.6	79	65.9	61.3
63 MOORE	55	79.1	297	89.4	56.7
64 NASH	52	59.7	249	59.2	56.3
65 NEW HANOVER	105	71.6	478	68.7	63.4
66 NORTHAMPTON	23	110.6	81	78.2	58.7
67 ONSLOW	63	42.8	274	36.9	77.1
68 ORANGE	44	41.0	201	38.2	51.0
69 PAMLICO	12	100.2	46	77.6	55.4
70 PASQUOTANK	24	69.5	110	65.5	59.7
71 PENDER	26	69.9	121	69.5	58.3
72 PERQUIMANS	9	82.6	53	99.2	68.2
73 PERSON	26	79.0	134	83.8	73.0
74 PITTS	85	68.3	305	51.6	61.8
75 POLK	14	85.4	65	82.2	47.7
76 RANDOLPH	89	73.2	352	60.6	57.1
77 RICHMOND	27	59.1	141	62.1	54.8
78 ROBESON	66	58.6	346	62.4	68.7
79 ROCKINGHAM	64	71.8	346	78.4	65.9
80 ROWAN	92	74.9	416	70.0	58.8
81 RUTHERFORD	55	92.6	228	77.4	62.4
82 SAMPSON	40	76.0	191	75.2	64.2
83 SCOTLAND	21	60.0	104	59.8	62.4
84 STANLY	34	61.7	174	64.4	55.6
85 STOKES	26	60.7	133	64.8	62.8
86 SURRY	49	73.3	249	76.5	61.1
87 SWAIN	11	91.7	42	72.0	57.3
88 TRANSYLVANIA	21	75.4	115	84.3	56.1
89 TYRRELL	3	81.7	12	63.7	48.5
90 UNION	46	43.3	238	48.4	56.0
91 VANCE	24	58.6	159	79.0	75.3
92 WAKE	181	32.5	951	36.7	51.6
93 WARREN	15	82.7	63	70.0	47.7
94 WASHINGTON	5	37.6	61	89.3	76.5
95 WATAUGA	25	61.2	84	42.2	45.4
96 WAYNE	73	64.5	322	58.2	61.8
97 WILKES	50	79.2	193	62.3	53.5
98 WILSON	47	68.4	228	67.2	61.4
99 YADKIN	12	34.1	90	53.4	43.1
100 YANCEY	12	73.4	43	53.4	39.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cancer - Trachea, Bronchus and Lung

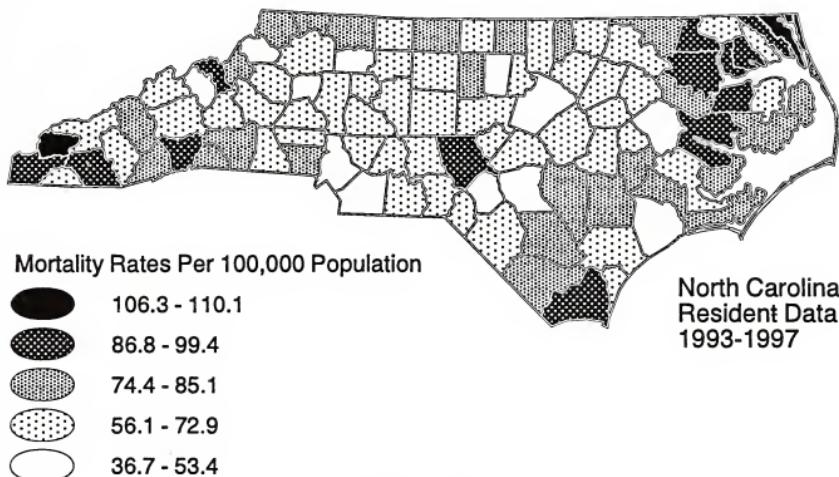


Figure 11.A

Cancer - Trachea, Bronchus and Lung

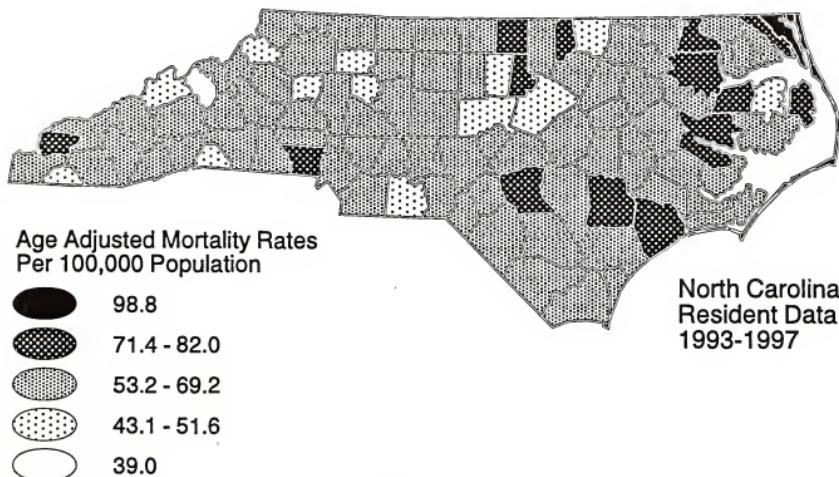


Figure 11.B

TABLE - 12
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CANCER - BREAST FEMALE

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	1217	31.8	5860	31.6	27.2

COUNTIES

1 ALAMANCE	26	41.4	113	37.2	28.0
2 ALEXANDER	2	12.8	16	21.2	18.0
3 ALLEGHENY	1	20.0	9	36.1	22.1
4 ANSON	5	39.5	33	52.0	42.5
5 ASHE	3	24.7	18	30.2	20.9
6 AVERY	1	13.0	10	26.4	20.5
7 BEAUFORT	8	34.9	44	38.6	28.3
8 BERTIE	7	63.6	21	37.8	29.6
9 BLADEN	5	30.8	34	42.8	34.0
10 BRUNSWICK	13	38.9	55	35.3	26.4
11 BUNCOMBE	46	46.0	228	46.3	33.6
12 BURKE	16	37.9	66	32.1	25.8
13 CABARRUS	20	33.5	78	27.4	23.0
14 CALDWELL	12	31.6	49	26.2	20.9
15 CAMDEN	1	32.4	5	32.5	23.6
16 CARTERET	9	30.1	66	45.3	35.5
17 CASWELL	3	26.5	19	34.5	26.1
18 CATAWBA	19	28.6	95	29.4	24.1
19 CHATHAM	8	34.3	36	32.4	25.0
20 CHEROKEE	4	34.5	22	39.0	25.7
21 CHOWAN	1	13.1	14	37.1	23.4
22 CLAY	1	23.9	8	39.9	24.1
23 CLEVELAND	19	40.4	90	38.9	30.7
24 COLUMBUS	7	25.3	49	35.9	28.6
25 CRAVEN	14	31.4	62	28.6	25.6
26 CUMBERLAND	35	24.2	175	24.4	29.0
27 CURRITUCK	2	24.3	14	35.7	30.0
28 DARE	5	36.3	26	40.2	35.7
29 DAVIDSON	21	29.5	97	27.9	23.2
30 DAVIE	4	25.2	18	23.6	18.8
31 DUPLIN	11	48.3	49	44.2	35.5
32 DURHAM	34	32.6	165	32.4	31.5
33 EDGECOMBE	12	39.5	49	31.8	28.0
34 FORSYTH	59	39.0	255	34.5	29.0
35 FRANKLIN	4	17.7	39	36.1	29.6
36 GASTON	38	40.8	160	34.6	29.5
37 GATES	3	59.7	13	52.4	42.0
38 GRAHAM	3	79.0	8	42.6	29.4
39 GRANVILLE	3	13.9	38	36.4	31.7
40 GREENE	2	23.1	14	33.7	26.9
41 GUILFORD	72	35.7	321	32.7	28.6
42 HALIFAX	19	64.5	66	44.1	36.4
43 HARNETT	15	35.8	64	32.2	29.4
44 HAYWOOD	7	26.0	46	35.1	22.9
45 HENDERSON	11	26.6	67	33.6	19.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CANCER - BREAST FEMALE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	2	16.8	23	38.0	33.3
47 HOKE	3	20.9	14	20.7	20.3
48 HYDE	2	73.9	4	29.6	25.7
49 IREDELL	13	23.1	80	29.9	23.9
50 JACKSON	6	39.5	14	18.7	16.1
51 JOHNSTON	11	20.8	66	26.8	22.8
52 JONES	4	83.8	10	40.2	33.4
53 LEE	5	20.0	26	23.5	19.7
54 LENOIR	12	37.9	65	41.2	31.4
55 LINCOLN	10	34.1	48	34.0	29.8
56 McDOWELL	7	34.8	40	41.6	30.3
57 MACON	3	20.8	29	42.2	25.8
58 MADISON	4	43.2	19	42.1	30.7
59 MARTIN	4	29.4	22	32.2	22.7
60 MECKLENBURG	85	27.0	404	27.0	27.5
61 MITCHELL	2	26.0	13	34.1	25.2
62 MONTGOMERY	4	33.6	19	32.4	27.7
63 MOORE	17	46.6	82	47.1	29.8
64 NASH	10	21.9	66	29.9	26.4
65 NEW HANOVER	19	24.6	121	33.0	27.5
66 NORTHAMPTON	6	55.4	29	53.9	36.3
67 ONSLOW	15	24.2	49	15.9	23.2
68 ORANGE	12	21.3	68	24.5	28.3
69 PAMILICO	1	16.0	13	42.1	26.3
70 PASQUOTANK	7	37.9	31	34.6	29.6
71 PENDER	6	31.2	27	30.1	23.3
72 PERQUIMANS	2	35.4	9	32.4	18.9
73 PERSON	8	46.6	32	38.4	29.3
74 PITTS	18	27.6	85	27.4	27.9
75 POLK	4	45.6	19	44.9	23.9
76 RANDOLPH	19	30.7	93	31.4	26.7
77 RICHMOND	13	54.5	56	47.2	36.4
78 ROBESON	16	26.9	71	24.3	23.4
79 ROCKINGHAM	23	49.2	77	33.3	25.2
80 ROWAN	18	28.6	104	34.1	25.5
81 RUTHERFORD	9	29.4	47	30.8	22.0
82 SAMPSON	17	61.4	60	45.0	35.6
83 SCOTLAND	4	21.2	28	30.0	27.4
84 STANLY	15	52.7	50	35.8	28.3
85 STOKES	5	23.0	23	22.0	19.4
86 SURRY	7	20.1	53	31.2	22.5
87 SWAIN	4	67.6	11	38.1	27.7
88 TRANSYLVANIA	6	41.9	27	38.5	23.0
89 TYRRELL	1	52.3	6	61.1	38.5
90 UNION	18	33.3	58	23.2	22.5
91 VANCE	8	36.8	40	37.5	31.6
92 WAKE	72	25.3	310	23.4	26.0
93 WARREN	7	74.2	24	51.3	36.5
94 WASHINGTON	3	42.6	14	38.8	27.5
95 WATAUGA	2	9.6	18	17.6	18.2
96 WAYNE	12	21.4	80	29.1	26.4
97 WILKES	8	24.8	44	27.8	21.7
98 WILSON	11	28.9	64	35.3	29.5
99 YADKIN	4	22.1	34	39.2	27.5
100 YANCEY	2	23.8	15	36.1	22.7

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cancer - Female Breast

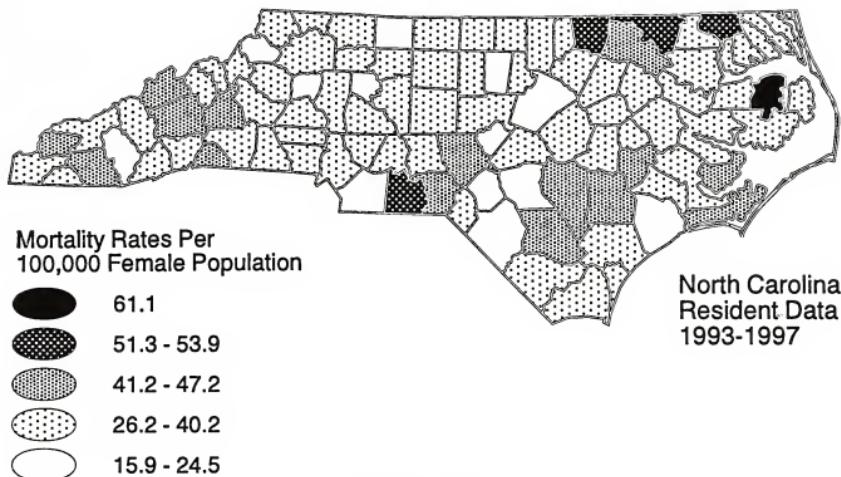


Figure 12.A

Cancer - Female Breast

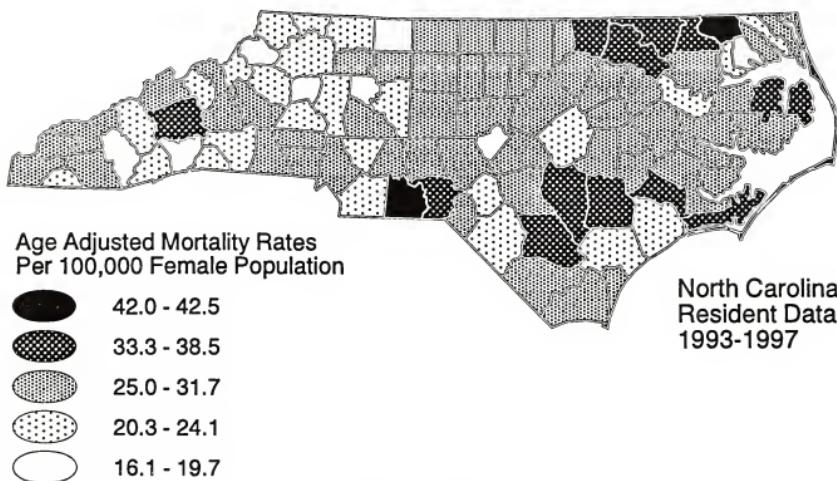


Figure 12.B

TABLE -13
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CANCER - PROSTATE

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	940	26.1	5009	28.7	36.2
COUNTIES					
1 ALAMANCE	14	24.6	91	33.1	34.0
2 ALEXANDER	6	38.7	22	29.4	41.6
3 ALLEGHANY	3	64.1	15	64.6	48.5
4 ANSON	9	80.5	28	50.0	48.7
5 ASHE	3	26.2	24	42.8	32.8
6 AVERY	3	38.7	10	26.3	23.8
7 BEAUFORT	6	29.3	38	37.2	39.3
8 BERTIE	8	86.6	29	61.9	61.3
9 BLADEN	2	14.2	30	43.2	43.7
10 BRUNSWICK	6	18.9	49	33.0	32.7
11 BUNCOMBE	30	32.9	163	36.5	32.5
12 BURKE	4	9.8	36	18.1	21.3
13 CABARRUS	13	22.9	56	20.8	28.0
14 CALDWELL	9	24.5	41	22.7	27.7
15 CAMDEN	1	31.0	4	25.2	24.8
16 CARTERET	11	37.8	41	28.9	30.0
17 CASWELL	6	55.9	33	63.2	62.0
18 CATAWBA	17	26.9	92	30.0	38.9
19 CHATHAM	7	32.1	25	24.0	23.7
20 CHEROKEE	7	64.8	20	38.2	25.7
21 CHOWAN	3	45.6	12	36.9	30.2
22 CLAY	2	51.6	15	80.6	52.7
23 CLEVELAND	11	25.2	64	29.9	33.7
24 COLUMBUS	9	37.0	53	44.1	50.0
25 CRAVEN	10	22.8	52	24.5	33.7
26 CUMBERLAND	30	19.9	130	17.3	45.5
27 CURRITUCK	2	23.9	16	40.1	52.8
28 DARE	3	22.0	21	32.9	46.9
29 DAVIDSON	13	18.8	78	23.2	27.7
30 DAVIE	2	13.1	18	24.5	24.9
31 DUPLIN	7	32.9	45	43.7	49.0
32 DURHAM	18	19.2	116	25.4	39.6
33 EDGECOMBE	6	24.0	47	36.9	48.0
34 FORSYTH	39	28.7	194	29.4	37.0
35 FRANKLIN	3	14.4	29	29.1	36.4
36 GASTON	21	24.2	106	24.6	33.3
37 GATES	3	61.4	11	45.7	47.0
38 GRAHAM	1	27.0	11	59.5	47.0
39 GRANVILLE	3	14.1	31	30.3	37.6
40 GREENE	5	55.7	13	30.6	42.0
41 GUILFORD	43	23.7	264	30.0	37.7
42 HALIFAX	10	37.9	60	44.7	47.8
43 HARNETT	11	27.9	55	29.4	39.9
44 HAYWOOD	4	16.4	36	32.0	23.7
45 HENDERSON	18	47.7	82	45.0	27.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CANCER - PROSTATE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	2	20.0	18	35.2	36.2
47 HOKE	1	6.9	24	35.2	68.1
48 HYDE	0	0.0	4	31.2	32.8
49 IREDELL	12	22.6	64	25.5	28.9
50 JACKSON	6	43.0	26	37.8	36.9
51 JOHNSTON	13	25.9	63	27.2	34.8
52 JONES	3	71.2	8	36.4	37.5
53 LEE	6	25.6	30	26.9	33.2
54 LENOIR	12	43.8	45	32.9	39.9
55 LINCOLN	5	17.5	31	22.6	29.7
56 MCDOWELL	6	31.1	30	32.7	32.4
57 MACON	6	60.5	26	41.4	24.3
58 MADISON	0	0.0	15	34.0	26.7
59 MARTIN	9	74.7	26	42.9	45.8
60 MECKLENBURG	58	19.8	307	22.1	36.9
61 MITCHELL	0	0.0	5	14.3	10.7
62 MONTGOMERY	2	15.9	19	31.0	38.1
63 MOORE	13	39.4	74	46.8	32.1
64 NASH	15	36.2	60	30.0	39.3
65 NEW HANOVER	18	25.9	91	27.6	33.0
66 NORTHAMPTON	7	70.2	36	72.3	64.4
67 ONSLOW	6	7.0	53	12.2	45.1
68 ORANGE	11	21.6	58	23.3	38.9
69 PAMLICO	6	104.7	21	74.1	61.8
70 PASQUOTANK	6	37.3	28	35.7	38.0
71 PENDER	4	22.2	33	39.2	44.1
72 PERQUIMANS	3	57.1	12	46.7	34.1
73 PERSON	3	19.0	16	20.9	22.3
74 PITTS	16	27.1	79	28.1	47.5
75 POLK	3	39.4	17	46.2	26.3
76 RANDOLPH	19	31.8	86	30.3	36.8
77 RICHMOND	6	27.5	47	43.3	49.1
78 ROBESON	20	37.6	104	39.8	60.2
79 ROCKINGHAM	10	23.6	74	35.3	36.7
80 ROWAN	15	25.0	120	41.5	40.4
81 RUTHERFORD	5	17.4	38	26.7	26.0
82 SAMPSON	12	48.1	48	39.9	41.4
83 SCOTLAND	10	61.8	37	46.0	65.0
84 STANLY	5	18.7	32	24.5	25.7
85 STOKES	3	14.2	29	28.7	35.6
86 SURRY	10	31.2	43	27.6	28.7
87 SWAIN	5	82.3	13	44.2	41.0
88 TRANSYLVANIA	3	22.2	31	46.7	32.6
89 TYRRELL	1	56.9	7	77.7	58.5
90 UNION	14	26.9	65	26.9	45.5
91 VANCE	6	31.2	37	39.1	49.4
92 WAKE	47	17.3	218	17.2	36.0
93 WARREN	5	57.4	26	60.3	47.5
94 WASHINGTON	1	16.0	11	34.2	35.1
95 WATAUGA	4	20.1	17	17.5	22.3
96 WAYNE	12	21.0	80	28.7	43.6
97 WILKES	10	32.4	38	25.1	26.9
98 WILSON	9	28.1	47	29.8	37.3
99 YADKIN	7	40.9	22	26.9	27.5
100 YANCEY	5	63.0	12	30.8	23.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Cancer - Prostate

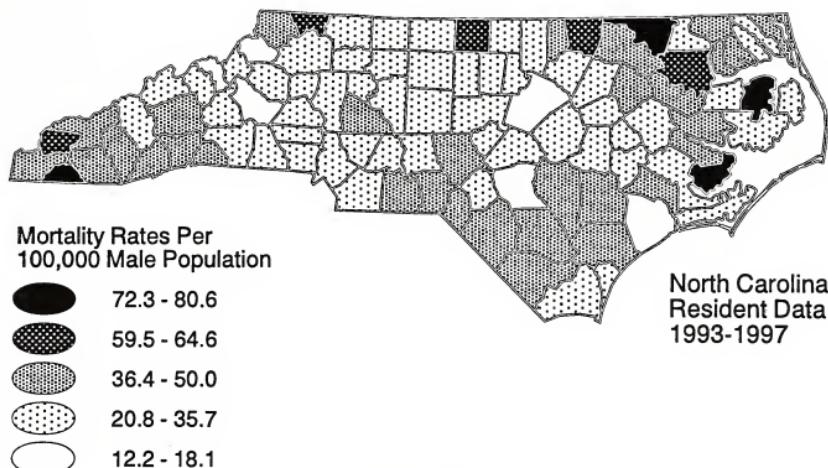


Figure 13.A

Cancer - Prostate

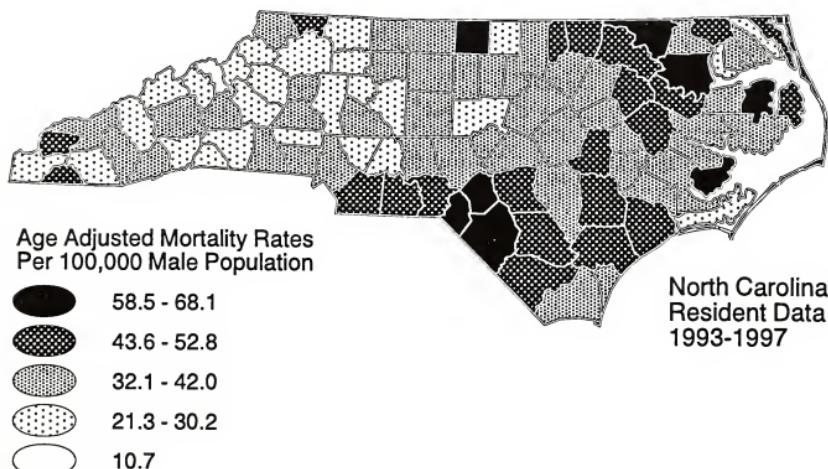


Figure 13.B

TABLE -14
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	480	6.5	4104	11.4	11.3

COUNTIES

1 ALAMANCE	4	3.3	55	9.5	9.6
2 ALEXANDER	1	3.2	6	4.0	4.1
3 ALLEGHANY	0	0.0	2	4.2	3.8
4 ANSON	2	8.4	15	12.6	13.5
5 ASHE	0	0.0	1	0.9	1.1
6 AVERY	0	0.0	1	1.3	1.4
7 BEAUFORT	3	6.9	38	17.6	19.0
8 BERTIE	1	4.9	8	7.8	8.4
9 BLADEN	3	9.9	17	11.4	11.2
10 BRUNSWICK	4	6.1	23	7.6	8.2
11 BUNCOMBE	13	6.8	123	13.1	13.5
12 BURKE	0	0.0	16	4.0	4.3
13 CABARRUS	3	2.6	33	6.0	6.0
14 CALDWELL	1	1.3	10	2.7	2.5
15 CAMDEN	1	15.8	2	6.4	7.8
16 CARTERET	1	1.7	10	3.5	3.5
17 CASWELL	1	4.5	6	5.6	5.8
18 CATAWBA	6	4.6	41	6.5	6.5
19 CHATHAM	1	2.2	14	6.5	6.6
20 CHEROKEE	1	4.5	5	4.6	4.3
21 CHOWAN	2	14.1	7	10.0	10.6
22 CLAY	0	0.0	3	7.8	8.1
23 CLEVELAND	6	6.6	39	8.8	9.0
24 COLUMBUS	3	5.8	31	12.1	12.8
25 CRAVEN	7	7.9	39	9.1	9.5
26 CUMBERLAND	25	8.5	160	10.9	11.4
27 CURRITUCK	0	0.0	1	1.3	1.0
28 DARE	0	0.0	5	3.9	3.4
29 DAVIDSON	2	1.4	44	6.4	6.4
30 DAVIE	0	0.0	5	3.3	3.7
31 DUPLIN	5	11.3	24	11.2	11.3
32 DURHAM	17	8.6	265	27.4	25.8
33 EDGECOMBE	10	18.1	43	15.3	15.7
34 FORSYTH	21	7.3	179	12.8	12.3
35 FRANKLIN	0	0.0	14	6.7	6.4
36 GASTON	21	11.7	126	14.1	14.0
37 GATES	0	0.0	2	4.1	4.2
38 GRAHAM	0	0.0	2	5.4	6.1
39 GRANVILLE	1	2.3	21	10.2	9.6
40 GREENE	1	5.7	7	8.3	8.0
41 GUILFORD	22	5.7	315	16.9	16.8
42 HALIFAX	2	3.6	42	14.8	15.8
43 HARNETT	2	2.5	24	6.2	6.5
44 HAYWOOD	1	2.0	9	3.6	3.8
45 HENDERSON	2	2.5	16	4.2	5.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
AIDS, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	2	9.1	14	12.5	14.6
47 HOKE	1	3.5	12	8.8	9.1
48 HYDE	0	0.0	3	11.4	10.3
49 IREDELL	3	2.7	29	5.6	5.7
50 JACKSON	1	3.4	3	2.1	1.7
51 JOHNSTON	8	7.8	51	10.7	10.6
52 JONES	0	0.0	5	10.7	12.4
53 LEE	2	4.1	16	6.9	7.0
54 LENOIR	10	16.9	54	18.3	19.5
55 LINCOLN	0	0.0	11	4.0	3.8
56 MCDOWELL	1	2.5	3	1.6	1.8
57 MACON	0	0.0	5	3.8	5.0
58 MADISON	0	0.0	1	1.1	0.9
59 MARTIN	4	15.6	12	9.3	9.3
60 MECKLENBURG	88	14.5	741	25.7	23.5
61 MITCHELL	0	0.0	4	5.5	6.4
62 MONTGOMERY	2	8.2	11	9.2	9.6
63 MOORE	3	4.3	19	5.7	6.8
64 NASH	1	1.1	41	9.7	9.6
65 NEW HANOVER	8	5.5	90	12.9	12.8
66 NORTHAMPTON	4	19.2	22	21.2	21.4
67 ONSLOW	2	1.4	34	4.6	5.6
68 ORANGE	4	3.7	47	8.9	8.9
69 PAMLICO	0	0.0	7	11.8	13.2
70 PASQUOTANK	3	8.7	14	8.3	8.8
71 PENDER	0	0.0	14	8.0	8.0
72 PERQUIMANS	3	27.5	5	9.4	9.3
73 PERSON	3	9.1	11	6.9	7.4
74 PITTS	6	4.8	93	15.7	16.2
75 POLK	0	0.0	5	6.3	6.7
76 RANDOLPH	4	3.3	25	4.3	4.2
77 RICHMOND	5	11.0	26	11.5	12.3
78 ROBESON	10	8.9	64	11.5	12.2
79 ROCKINGHAM	3	3.4	33	7.5	7.5
80 ROWAN	11	9.0	55	9.3	9.5
81 RUTHERFORD	2	3.4	14	4.8	5.1
82 SAMPSON	6	11.4	31	12.2	12.6
83 SCOTLAND	2	5.7	17	9.8	10.1
84 STANLY	4	7.3	15	5.6	5.6
85 STOKES	1	2.3	4	1.9	1.9
86 SURRY	1	1.5	7	2.1	2.2
87 SWAIN	0	0.0	1	1.7	1.8
88 TRANSYLVANIA	0	0.0	8	5.9	7.0
89 TYRRELL	0	0.0	0	0.0	0.0
90 UNION	5	4.7	33	6.7	6.5
91 VANCE	6	14.6	46	22.9	23.7
92 WAKE	38	6.8	335	12.9	11.7
93 WARREN	1	5.5	7	7.8	8.6
94 WASHINGTON	0	0.0	9	13.2	14.7
95 WATAUGA	1	2.4	5	2.5	3.3
96 WAYNE	14	12.4	75	13.5	13.1
97 WILKES	0	0.0	4	1.3	1.3
98 WILSON	11	16.0	59	17.4	18.0
99 YADKIN	0	0.0	3	1.8	1.9
100 YANCEY	0	0.0	2	2.5	3.2

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Acquired Immune Deficiency Syndrome

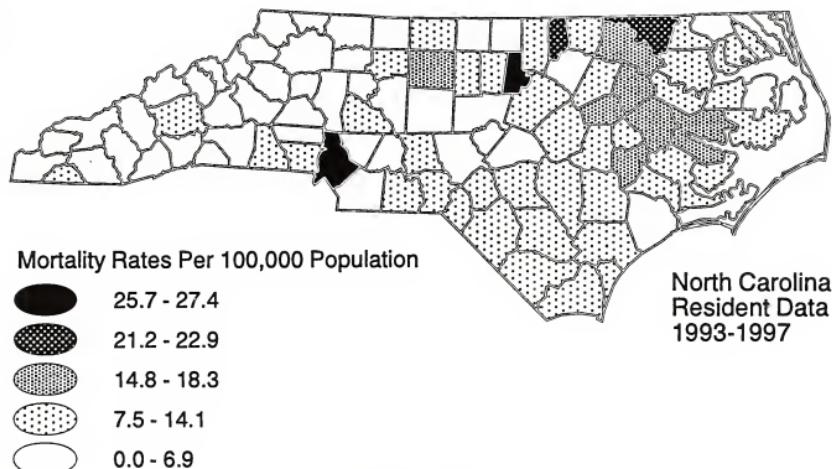


Figure 14.A

Acquired Immune Deficiency Syndrome

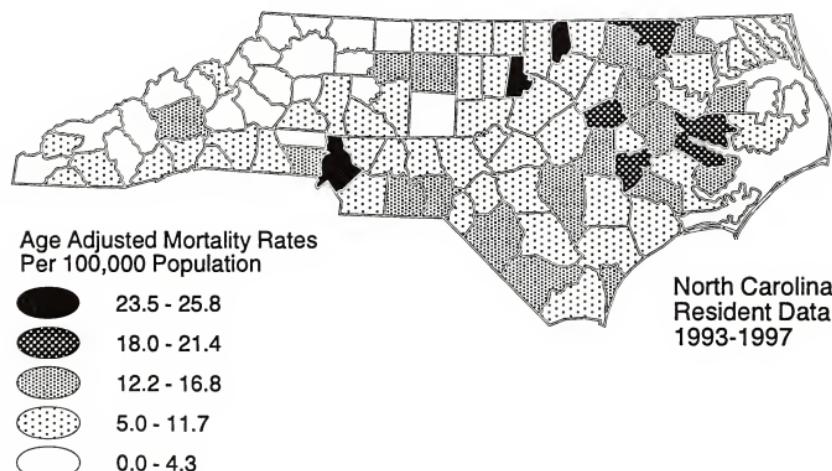


Figure 14.B

TABLE - 15
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
SEPTICEMIA

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	655	8.8	3199	8.9	8.3

COUNTIES

1 ALAMANCE	12	10.0	61	10.5	8.6
2 ALEXANDER	1	3.2	8	5.3	5.1
3 ALLEGHANY	0	0.0	4	8.3	4.6
4 ANSON	2	8.4	7	5.9	4.0
5 ASHE	2	8.5	9	7.8	5.1
6 AVERY	1	6.5	5	6.6	4.5
7 BEAUFORT	8	18.4	29	13.4	10.2
8 BERTIE	6	29.6	11	10.7	8.8-
9 BLADEN	4	13.2	26	17.5	14.0
10 BRUNSWICK	1	1.5	20	6.6	6.2
11 BUNCOMBE	15	7.8	96	10.2	7.2
12 BURKE	9	10.8	34	8.4	7.1
13 CABARRUS	3	2.6	35	6.3	5.8
14 CALDWELL	2	2.7	18	4.9	4.5
15 CAMDEN	0	0.0	1	3.2	2.6
16 CARTERET	3	5.1	12	4.2	3.4
17 CASWELL	6	27.2	14	13.1	9.6
18 CATAWBA	8	6.2	47	7.5	6.9
19 CHATHAM	4	8.9	22	10.2	7.9
20 CHEROKEE	2	8.9	16	14.7	9.8
21 CHOWAN	1	7.0	4	5.7	3.3
22 CLAY	0	0.0	3	7.8	4.2
23 CLEVELAND	11	12.1	51	11.5	9.5
24 COLUMBUS	6	11.6	41	16.0	13.5
25 CRAVEN	15	17.0	64	14.9	15.3
26 CUMBERLAND	15	5.1	84	5.7	8.7
27 CURRITUCK	2	12.1	8	10.1	9.9
28 DARE	2	7.3	14	10.9	11.4
29 DAVIDSON	14	10.0	40	5.9	5.6
30 DAVIE	2	6.4	15	10.0	7.8
31 DUPLIN	3	6.8	23	10.8	9.1
32 DURHAM	22	11.1	109	11.3	12.1
33 EDGECOMBE	9	16.2	50	17.8	17.1
34 FORSYTH	25	8.7	144	10.3	9.1
35 FRANKLIN	8	18.4	28	13.5	12.3
36 GASTON	13	7.2	70	7.8	7.3
37 GATES	0	0.0	5	10.2	8.6
38 GRAHAM	0	0.0	1	2.7	1.6
39 GRANVILLE	5	11.7	23	11.1	10.7
40 GREENE	1	5.7	9	10.7	9.4
41 GUILFORD	24	6.3	139	7.5	6.9
42 HALIFAX	9	16.1	45	15.8	13.0
43 HARNETT	3	3.7	40	10.4	10.4
44 HAYWOOD	7	13.7	25	10.0	5.7
45 HENDERSON	11	13.9	36	9.4	5.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
SEPTICEMIA, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	2	9.1	8	7.2	6.0
47 HOKE	3	10.4	13	9.6	11.4
48 HYDE	0	0.0	1	3.8	3.1
49 IREDELL	8	7.3	45	8.7	7.6
50 JACKSON	2	6.9	22	15.3	11.3
51 JOHNSTON	9	8.7	36	7.5	7.1
52 JONES	2	22.3	8	17.1	14.4
53 LEE	9	18.6	27	11.7	10.4
54 LENOIR	7	11.9	28	9.5	8.1
55 LINCOLN	2	3.5	16	5.7	5.5
56 McDOWELL	0	0.0	13	6.9	5.7
57 MACON	3	10.8	17	12.9	6.3
58 MADISON	1	5.5	31	34.8	20.9
59 MARTIN	3	11.7	20	15.5	13.0
60 MECKLENBURG	48	7.9	229	7.9	9.1
61 MITCHELL	2	13.6	13	17.8	12.2
62 MONTGOMERY	2	8.2	9	7.5	7.0
63 MOORE	6	8.6	29	8.7	5.8
64 NASH	14	16.1	48	11.4	10.6
65 NEW HANOVER	7	4.8	38	5.5	5.1
66 NORTHHAMPTON	3	14.4	12	11.6	9.0
67 ONSLOW	5	3.4	24	3.2	6.7
68 ORANGE	8	7.5	24	4.6	5.7
69 PAMlico	2	16.7	6	10.1	6.9
70 PASQUOTANK	4	11.6	10	6.0	5.3
71 PENDER	0	0.0	12	6.9	5.9
72 PERQUIMANS	0	0.0	5	9.4	6.7
73 PERSON	7	21.3	20	12.5	10.2
74 PITTS	23	18.5	72	12.2	13.9
75 POLK	1	6.1	6	7.6	4.7
76 RANDOLPH	10	8.2	41	7.1	6.6
77 RICHMOND	5	11.0	27	11.9	10.0
78 ROBESON	16	14.2	57	10.3	11.0
79 ROCKINGHAM	11	12.3	48	10.9	8.7
80 ROWAN	9	7.3	58	9.8	7.3
81 RUTHERFORD	7	11.8	30	10.2	7.7
82 SAMPSON	6	11.4	33	13.0	10.5
83 SCOTLAND	4	11.4	15	8.6	8.9
84 STANLY	2	3.6	20	7.4	6.1
85 STOKES	6	14.0	17	8.3	7.8
86 SURRY	10	15.0	38	11.7	8.8
87 SWAIN	8	66.7	19	32.6	25.3
88 TRANSYLVANIA	1	3.6	7	5.1	2.9
89 TYRRELL	0	0.0	1	5.3	3.1
90 UNION	12	11.3	41	8.3	10.1
91 VANCE	4	9.8	28	13.9	12.6
92 WAKE	29	5.2	155	6.0	8.3
93 WARREN	3	16.5	9	10.0	7.0
94 WASHINGTON	0	0.0	5	7.3	6.8
95 WATAUGA	2	4.9	9	4.5	4.5
96 WAYNE	9	8.0	38	6.9	7.6
97 WILKES	9	14.3	52	16.8	13.8
98 WILSON	7	10.2	41	12.1	11.0
99 YADKIN	4	11.4	17	10.1	7.0
100 YANCEY	1	6.1	5	6.2	4.2

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Septicemia

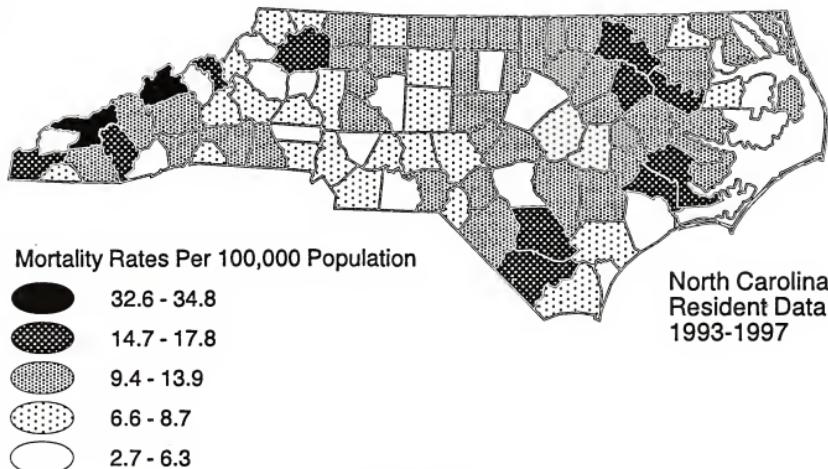


Figure 15.A

Septicemia

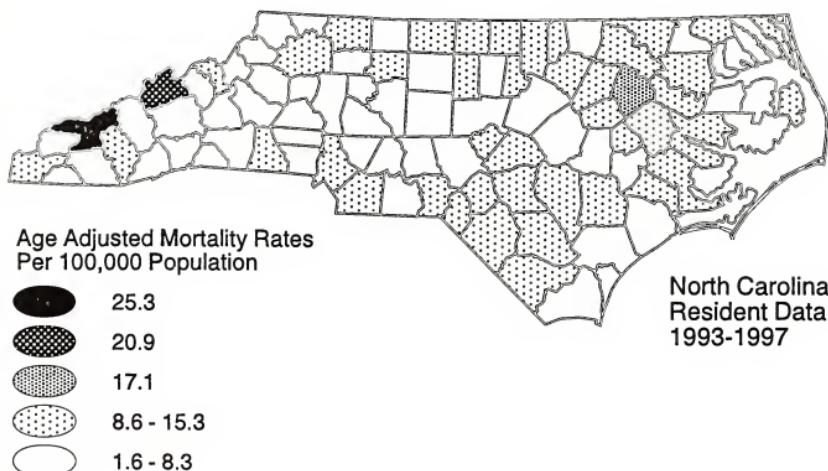


Figure 15.B

TABLE - 16
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
DIABETES MELLITUS

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	1833	24.7	8561	23.8	22.6

COUNTIES

1 ALAMANCE	36	30.0	190	32.8	26.4
2 ALEXANDER	5	16.1	26	17.3	16.5
3 ALLEGHANY	0	0.0	10	20.8	13.0
4 ANSON	6	25.2	29	24.3	21.0
5 ASHE	7	29.7	37	32.0	21.3
6 AVERY	1	6.5	15	19.7	14.2
7 BEAUFORT	16	36.9	84	38.9	31.6
8 BERTIE	16	79.0	59	57.6	48.3
9 BLADEF	16	52.8	45	30.2	24.3
10 BRUNSWICK	19	29.1	90	29.6	24.1
11 BUNCOMBE	34	17.8	227	24.2	18.2
12 BURKE	23	27.7	111	27.4	23.3
13 CABARRUS	35	30.0	122	22.1	19.8
14 CALDWELL	19	25.4	93	25.3	22.6
15 CAMDEN	4	63.4	9	28.8	26.0
16 CARTERET	18	30.5	66	22.9	18.7
17 CASWELL	5	22.7	32	29.8	24.0
18 CATAWBA	29	22.4	146	23.2	21.8
19 CHATHAM	10	22.2	53	24.6	19.6
20 CHEROKEE	5	22.3	23	21.1	13.8
21 CHOWAN	1	7.0	17	24.2	16.3
22 CLAY	3	37.2	11	28.4	15.6
23 CLEVELAND	32	35.3	123	27.6	23.3
24 COLUMBUS	13	25.0	55	21.4	18.3
25 CRAVEN	15	17.0	87	20.3	20.7
26 CUMBERLAND	71	24.0	285	19.4	30.3
27 CURRITUCK	3	18.1	10	12.7	12.1
28 DARE	1	3.7	9	7.0	7.1
29 DAVIDSON	39	27.8	159	23.3	21.7
30 DAVIE	10	32.1	49	32.7	26.3
31 DUPLIN	18	40.8	66	30.9	26.3
32 DURHAM	52	26.3	231	23.9	27.6
33 EDGECOMBE	13	23.5	96	34.1	32.9
34 FORSYTH	75	26.1	366	26.1	24.0
35 FRANKLIN	16	36.8	70	33.7	31.6
36 GASTON	45	25.0	216	24.2	23.1
37 GATES	2	20.2	13	26.6	22.4
38 GRAHAM	5	66.6	23	61.7	45.4
39 GRANVILLE	11	25.7	55	26.6	25.3
40 GREENE	4	22.7	24	28.6	25.8
41 GUILFORD	75	19.6	380	20.4	19.3
42 HALIFAX	28	50.1	97	34.1	29.6
43 HARNETT	16	19.7	97	25.2	25.6
44 HAYWOOD	13	25.4	60	24.0	13.9
45 HENDERSON	13	16.4	73	19.1	12.2

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
DIABETES MELLITUS, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	12	54.8	56	50.2	42.0
47 HOKE	9	31.2	30	22.1	26.2
48 HYDE	4	75.8	13	49.3	35.9
49 IREDELL	21	19.2	94	18.1	15.9
50 JACKSON	7	24.0	29	20.2	17.0
51 JOHNSTON	21	20.4	99	20.7	19.6
52 JONES	2	22.3	12	25.6	21.5
53 LEE	18	37.2	68	29.5	26.2
54 LENOIR	14	23.7	81	27.5	23.5
55 LINCOLN	10	17.3	50	18.0	17.7
56 McDOWELL	10	25.4	60	31.9	24.6
57 MACON	12	43.4	52	39.5	23.3
58 MADISON	3	16.4	16	17.9	12.0
59 MARTIN	9	35.1	53	41.1	33.9
60 MECKLENBURG	128	21.0	548	19.0	22.6
61 MITCHELL	6	40.7	29	39.7	26.4
62 MONTGOMERY	5	20.4	36	30.0	27.7
63 MOORE	10	14.4	48	14.5	9.0
64 NASH	20	23.0	106	25.2	23.9
65 NEW HANOVER	40	27.3	138	19.8	18.2
66 NORTHAMPTON	11	52.9	43	41.5	31.6
67 ONSLOW	14	9.5	72	9.7	20.3
68 ORANGE	15	14.0	65	12.4	15.8
69 PAMLICO	4	33.4	20	33.8	25.4
70 PASQUOTANK	5	14.5	45	26.8	24.4
71 PENDER	20	53.8	65	37.4	32.0
72 PERQUIMANS	4	36.7	14	26.2	17.1
73 PERSON	9	27.3	43	26.9	22.4
74 PITTS	35	28.1	148	25.0	29.6
75 POLK	2	12.2	21	26.6	14.9
76 RANDOLPH	29	23.9	121	20.6	19.5
77 RICHMOND	20	43.8	68	30.0	26.2
78 ROBESON	53	47.0	253	45.7	49.9
79 ROCKINGHAM	23	25.8	120	27.2	22.1
80 ROWAN	33	26.9	172	28.9	23.9
81 RUTHERFORD	10	16.8	57	19.3	15.1
82 SAMPSON	9	17.1	61	24.0	19.7
83 SCOTLAND	17	48.6	71	40.8	42.7
84 STANLY	17	30.8	88	32.6	27.1
85 STOKES	7	16.3	33	16.1	15.1
86 SURRY	20	29.9	90	27.6	21.4
87 SWAIN	8	66.7	33	56.6	44.3
88 TRANSYLVANIA	7	25.1	36	26.4	15.9
89 TYRRELL	1	27.2	6	31.9	22.1
90 UNION	20	16.8	96	19.5	23.1
91 VANCE	17	41.5	99	49.2	46.4
92 WAKE	97	17.4	409	15.8	22.1
93 WARREN	3	16.5	32	35.6	23.3
94 WASHINGTON	3	22.6	16	23.4	20.6
95 WATAUGA	4	9.8	22	11.0	11.0
96 WAYNE	33	29.2	152	27.5	30.1
97 WILKES	9	14.3	51	16.4	14.0
98 WILSON	21	30.6	113	33.3	30.2
99 YADKIN	10	28.4	53	31.4	24.7
100 YANCEY	4	24.5	16	19.9	12.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Diabetes Mellitus

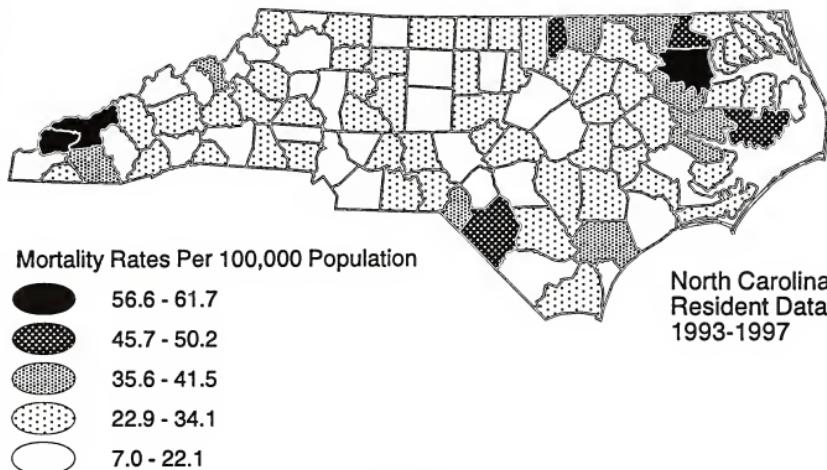


Figure 16.A

Diabetes Mellitus

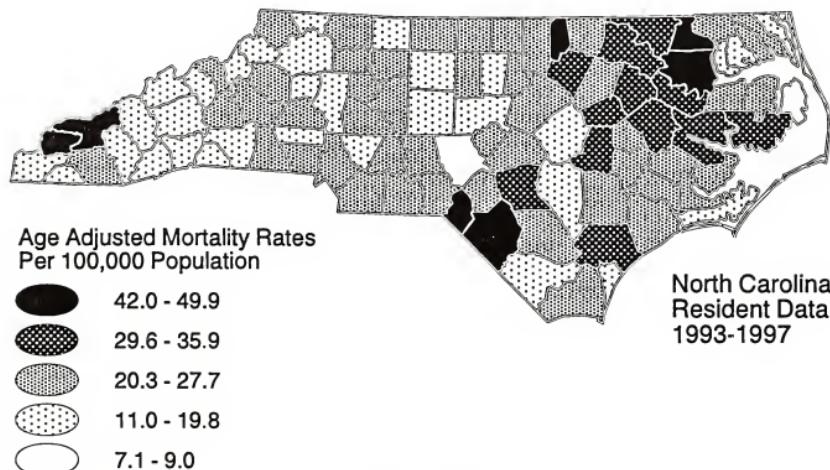


Figure 16.B

TABLE - 17
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
PNEUMONIA AND INFLUENZA

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	2457	33.1	11912	33.1	30.2

COUNTIES

1 ALAMANCE	30	25.0	141	24.4	18.8
2 ALEXANDER	10	32.2	62	41.2	39.4
3 ALLEGHANY	14	144.6	46	95.5	55.6
4 ANSON	12	50.3	72	60.3	42.5
5 ASHE	10	42.4	57	49.3	29.7
6 AVERY	13	84.1	48	63.2	44.1
7 BEAUFORT	18	41.5	92	42.6	31.0
8 BERTIE	12	59.3	45	43.9	35.4
9 BLADEN	12	39.6	76	51.0	39.6
10 BRUNSWICK	14	21.5	83	27.3	25.2
11 BUNCOMBE	70	36.6	383	40.8	26.3
12 BURKE	33	39.7	148	36.5	31.0
13 CABARRUS	63	54.1	272	49.2	42.7
14 CALDWELL	21	28.1	93	25.3	22.3
15 CAMDEN	3	47.6	10	32.0	27.9
16 CARTERET	12	20.3	58	20.2	16.9
17 CASWELL	6	27.2	33	30.8	22.8
18 CATAWBA	56	43.2	305	48.4	44.7
19 CHATHAM	16	35.5	93	43.1	31.4
20 CHEROKEE	16	71.4	60	55.1	32.6
21 CHOWAN	9	63.3	57	81.1	47.0
22 CLAY	3	37.2	11	28.4	16.9
23 CLEVELAND	32	35.3	206	46.3	37.6
24 COLUMBUS	20	38.5	101	39.4	33.6
25 CRAVEN	25	28.3	112	26.1	27.0
26 CUMBERLAND	55	18.6	248	16.9	29.1
27 CURRITUCK	7	42.2	35	44.3	43.7
28 DARE	11	40.2	60	46.7	52.0
29 DAVIDSON	54	38.5	191	28.0	25.8
30 DAVIE	9	28.9	60	40.1	30.5
31 DUPLIN	14	31.8	86	40.2	32.6
32 DURHAM	75	37.9	324	33.5	34.1
33 EDGECOMBE	25	45.1	101	35.9	32.8
34 FORSYTH	89	31.0	442	31.6	27.1
35 FRANKLIN	7	16.1	70	33.7	28.9
36 GASTON	62	34.4	339	38.0	35.2
37 GATES	4	40.3	22	45.0	37.5
38 GRAHAM	3	40.0	21	56.4	38.1
39 GRANVILLE	18	42.1	108	52.3	47.3
40 GREENE	4	22.7	20	23.8	20.8
41 GUILFORD	125	32.6	586	31.5	28.0
42 HALIFAX	26	46.6	96	33.8	27.4
43 HARNETT	32	39.3	159	41.3	40.7
44 HAYWOOD	23	44.9	149	59.6	33.8
45 HENDERSON	54	68.2	260	68.1	32.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
PNEUMONIA AND INFLUENZA, CONTD

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	7	31.9	38	34.0	24.6
47 HOKE	8	27.7	26	19.2	22.9
48 HYDE	2	37.9	10	38.0	26.4
49 IREDELL	50	45.8	218	42.1	35.7
50 JACKSON	23	78.9	94	65.5	48.1
51 JOHNSTON	36	34.9	151	31.6	30.0
52 JONES	7	77.9	18	38.4	31.5
53 LEE	11	22.7	85	36.9	32.8
54 LENOIR	12	20.3	70	23.8	19.7
55 LINCOLN	20	34.5	105	37.7	36.5
56 McDOWELL	19	48.2	69	36.7	26.5
57 MACON	28	101.2	81	61.6	29.6
58 MADISON	16	87.3	61	68.4	41.3
59 MARTIN	11	42.9	54	41.8	33.6
60 MECKLENBURG	133	21.9	622	21.5	25.2
61 MITCHELL	8	54.3	37	50.6	30.8
62 MONTGOMERY	6	24.5	29	24.2	20.6
63 MOORE	25	36.0	161	48.5	28.4
64 NASH	45	51.7	159	37.8	35.0
65 NEW HANOVER	31	21.1	171	24.6	22.4
66 NORTHAMPTON	6	28.8	42	40.6	27.8
67 ONSLOW	27	18.3	97	13.1	29.0
68 ORANGE	21	19.6	123	23.4	29.0
69 PAMLICO	8	66.8	30	50.6	30.3
70 PASQUOTANK	12	34.8	80	47.7	36.8
71 PENDER	11	29.6	53	30.5	26.0
72 PERQUIMANS	7	64.2	21	39.3	25.2
73 PERSON	15	45.6	67	41.9	32.4
74 PITTS	30	24.1	156	26.4	30.4
75 POLK	2	12.2	46	58.2	22.5
76 RANDOLPH	36	29.6	148	25.5	23.2
77 RICHMOND	25	54.8	102	44.9	37.1
78 ROBESON	31	27.5	165	29.8	32.2
79 ROCKINGHAM	37	41.5	162	36.7	28.1
80 ROWAN	58	47.2	283	47.6	34.8
81 RUTHERFORD	40	67.3	204	69.2	48.3
82 SAMPSON	19	36.1	133	52.4	41.3
83 SCOTLAND	11	31.4	53	30.5	31.8
84 STANLY	10	18.1	66	24.4	18.9
85 STOKES	22	51.3	137	66.7	61.5
86 SURRY	30	44.9	121	37.2	27.3
87 SWAIN	8	66.7	37	63.4	43.7
88 TRANSYLVANIA	11	39.5	61	44.7	25.7
89 TYRRELL	2	54.5	13	69.1	38.7
90 UNION	22	20.7	118	24.0	29.4
91 VANCE	14	34.2	59	29.3	26.5
92 WAKE	96	17.2	438	16.9	23.5
93 WARREN	7	38.6	45	50.0	32.7
94 WASHINGTON	8	60.2	28	41.0	32.3
95 WATAUGA	9	22.0	61	30.6	29.6
96 WAYNE	19	16.8	126	22.8	25.2
97 WILKES	24	38.0	104	33.5	26.7
98 WILSON	29	42.2	125	36.8	33.3
99 YADKIN	18	51.1	69	40.9	29.8
100 YANCEY	7	42.8	39	48.5	28.7

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Pneumonia and Influenza

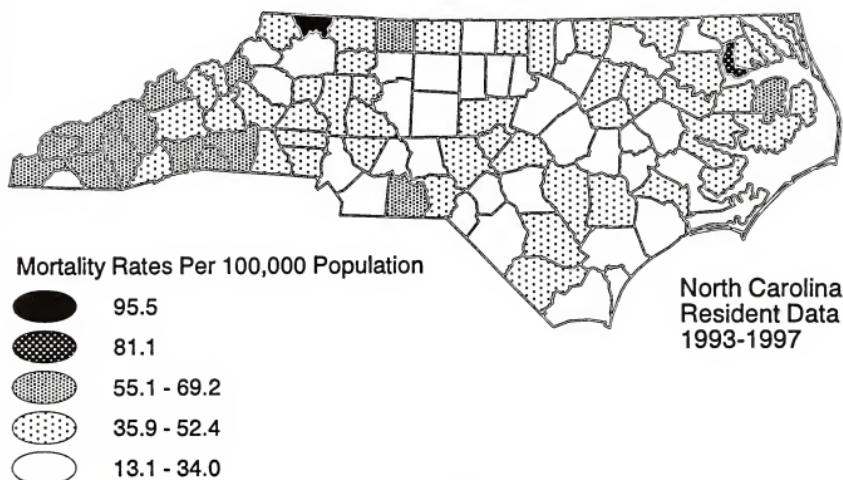


Figure 17.A

Pneumonia and Influenza

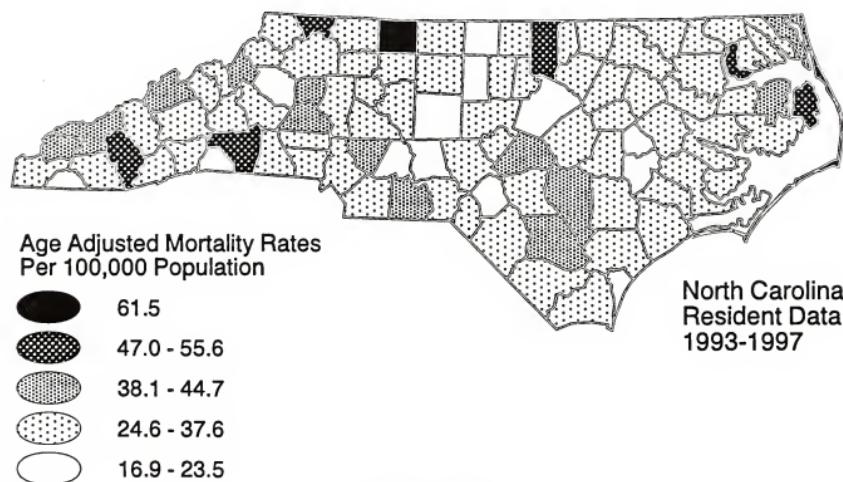


Figure 17.B

TABLE -18
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	3195	43.0	14451	40.2	38.3

COUNTIES

1 ALAMANCE	75	62.6	316	54.6	42.5
2 ALEXANDER	15	48.3	50	33.2	33.3
3 ALLEGHANY	5	51.6	29	60.2	35.5
4 ANSON	9	37.7	40	33.5	26.3
5 ASHE	17	72.0	95	82.1	54.4
6 AVERY	9	58.2	49	64.5	49.8
7 BEAUFORT	24	55.3	99	45.8	35.6
8 BERTIE	14	69.1	47	45.9	37.6
9 BLADEF	11	36.3	74	49.7	41.0
10 BRUNSWICK	27	41.4	144	47.4	37.9
11 BUNCOMBE	134	70.1	548	58.3	42.8
12 BURKE	38	45.7	190	46.9	40.3
13 CABARRUS	39	33.5	216	39.1	35.3
14 CALDWELL	32	42.8	160	43.5	39.7
15 CAMDEN	4	63.4	23	73.6	62.1
16 CARTERET	37	62.7	141	49.0	40.0
17 CASWELL	9	40.8	55	51.3	40.1
18 CATAWBA	54	41.7	249	39.5	37.5
19 CHATHAM	16	35.5	78	36.2	28.6
20 CHEROKEE	17	75.8	74	68.0	42.9
21 CHOWAN	3	21.1	38	54.1	36.1
22 CLAY	6	74.4	32	82.7	47.1
23 CLEVELAND	28	30.9	155	34.8	29.2
24 COLUMBUS	16	30.8	108	42.1	36.4
25 CRAVEN	37	41.8	177	41.2	41.8
26 CUMBERLAND	96	32.5	421	28.7	48.3
27 CURRITUCK	10	60.3	45	56.9	54.4
28 DARE	14	51.1	49	38.1	39.2
29 DAVIDSON	65	46.3	290	42.5	39.9
30 DAVIE	13	41.7	63	42.1	33.6
31 DUPLIN	18	40.8	81	37.9	31.6
32 DURHAM	72	36.4	291	30.1	34.2
33 EDGECOMBE	20	36.1	121	43.0	40.9
34 FORSYTH	128	44.6	588	42.0	39.0
35 FRANKLIN	18	41.4	67	32.2	29.4
36 GASTON	77	42.8	406	45.5	43.6
37 GATES	4	40.3	22	45.0	37.4
38 GRAHAM	7	93.3	30	80.5	55.9
39 GRANVILLE	16	37.4	72	34.8	33.2
40 GREENE	4	22.7	25	29.7	27.2
41 GUILFORD	205	53.5	820	44.1	41.8
42 HALIFAX	21	37.6	154	54.2	45.4
43 HARNETT	41	50.4	175	45.4	45.8
44 HAYWOOD	38	74.1	177	70.8	43.0
45 HENDERSON	58	73.3	267	70.0	39.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
COPD - CHRONIC OBSTRUCTIVE PULMONARY DISEASE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	14	63.9	45	40.3	31.3
47 HOKE	16	55.4	43	31.7	39.2
48 HYDE	4	75.8	14	53.1	38.2
49 IREDELL	48	43.9	237	45.7	40.0
50 JACKSON	15	51.5	81	56.5	46.1
51 JOHNSTON	38	36.8	169	35.4	33.8
52 JONES	5	55.6	36	76.8	63.7
53 LEE	24	49.6	76	33.0	28.7
54 LENOIR	32	54.2	144	48.9	40.9
55 LINCOLN	23	39.7	102	36.6	35.9
56 McDOWELL	28	71.0	102	54.2	43.0
57 MACON	20	72.3	83	63.1	33.8
58 MADISON	15	81.8	62	69.5	47.4
59 MARTIN	10	39.0	45	34.9	28.2
60 MECKLENBURG	186	30.6	859	29.7	36.8
61 MITCHELL	14	95.1	55	75.2	45.6
62 MONTGOMERY	8	32.7	56	46.7	42.6
63 MOORE	42	60.4	175	52.7	31.1
64 NASH	42	48.2	168	39.9	38.1
65 NEW HANOVER	71	48.4	308	44.3	40.7
66 NORTHAMPTON	10	45.1	57	55.0	39.9
67 ONSLOW	37	25.1	168	22.7	50.8
68 ORANGE	30	28.0	108	20.5	27.3
69 PAMLICO	9	75.2	34	57.4	39.3
70 PASQUOTANK	20	57.9	93	55.4	47.3
71 PENDER	25	67.2	93	53.5	45.1
72 PERQUIMANS	5	45.9	23	43.0	27.3
73 PERSON	16	48.6	65	40.7	33.4
74 PITTS	57	45.8	203	34.3	41.1
75 POLK	10	61.0	54	68.3	32.5
76 RANDOLPH	60	49.4	240	41.3	39.1
77 RICHMOND	19	41.6	122	53.7	46.1
78 ROBESON	42	37.3	182	32.8	36.3
79 ROCKINGHAM	49	55.0	240	54.4	44.1
80 ROWAN	54	44.0	277	46.6	36.8
81 RUTHERFORD	35	58.9	153	51.9	40.0
82 SAMPSON	21	39.9	116	45.7	36.8
83 SCOTLAND	10	28.6	71	40.8	42.4
84 STANLY	28	50.8	122	45.1	37.4
85 STOKES	17	39.7	67	32.6	31.5
86 SURRY	40	59.8	195	59.9	46.1
87 SWAIN	4	33.4	22	37.7	27.7
88 TRANSYLVANIA	20	71.8	74	54.3	32.9
89 TYRRELL	8	217.9	18	95.6	65.3
90 UNION	21	19.8	103	20.9	24.9
91 VANCE	23	56.1	106	52.7	48.4
92 WAKE	130	23.3	555	21.4	31.4
93 WARREN	5	27.6	38	42.3	26.9
94 WASHINGTON	5	37.6	24	35.1	30.0
95 WATAUGA	10	24.5	50	25.1	26.5
96 WAYNE	41	36.2	197	35.6	38.9
97 WILKES	27	42.8	120	38.7	32.7
98 WILSON	28	40.7	134	39.5	36.2
99 YADKIN	15	42.6	70	41.5	32.6
100 YANCEY	8	48.9	46	57.1	36.1

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Chronic Obstructive Pulmonary Diseases

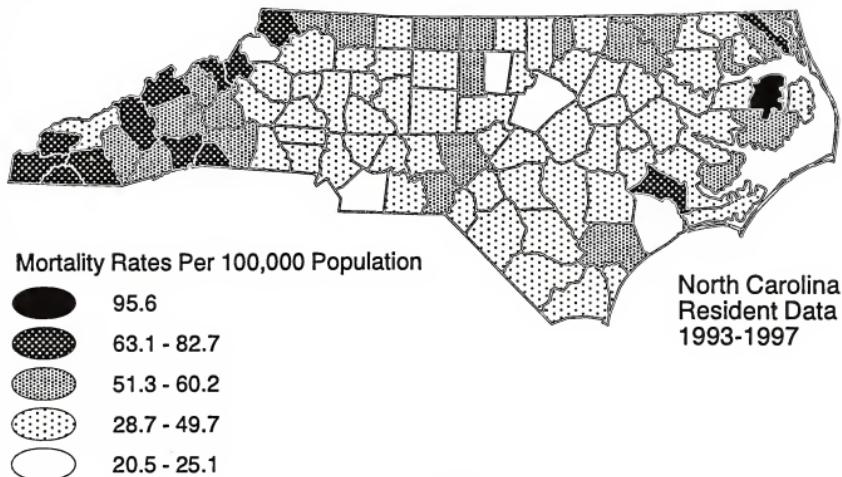


Figure 18.A

Chronic Obstructive Pulmonary Diseases

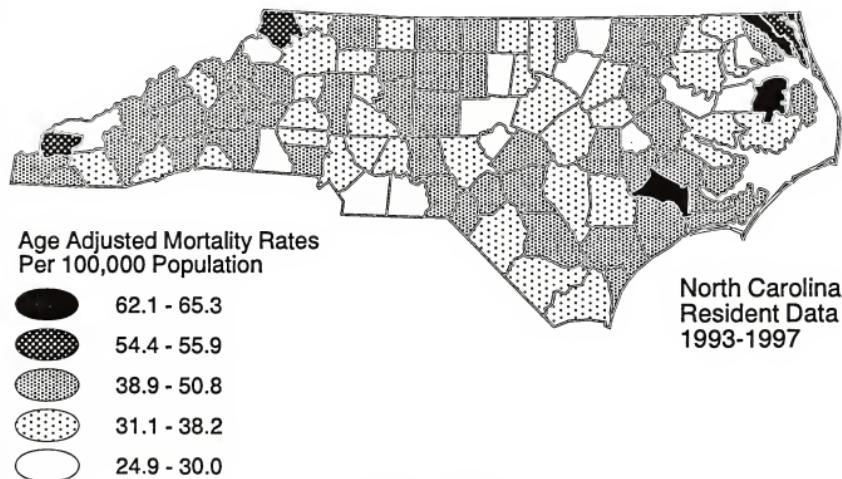


Figure 18.B

TABLE - 19
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
CHRONIC LIVER DISEASE AND CIRRHOSIS

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	663	8.9	3372	9.4	9.0
COUNTIES					
1 ALAMANCE	11	9.2	60	10.4	9.0
2 ALEXANDER	2	6.4	16	10.6	9.8
3 ALLEGHANY	1	10.3	5	10.4	7.0
4 ANSON	2	8.4	13	10.9	10.3
5 ASHE	0	0.0	11	9.5	7.3
6 AVERY	2	12.9	11	14.5	12.3
7 BEAUFORT	2	4.6	19	8.8	7.2
8 BERTIE	0	0.0	12	11.7	10.5
9 BLADEN	3	9.9	23	15.4	13.5
10 BRUNSWICK	5	7.7	39	12.8	10.3
11 BUNCOMBE	28	14.7	132	14.1	11.6
12 BURKE	6	7.2	39	9.6	8.5
13 CABARRUS	4	3.4	34	6.2	5.7
14 CALDWELL	9	12.0	35	9.5	8.3
15 CAMDEN	1	15.9	2	6.4	5.0
16 CARTERET	10	16.9	30	10.4	8.6
17 CASWELL	3	13.6	16	14.9	12.8
18 CATAWBA	6	4.6	61	9.7	8.9
19 CHATHAM	5	11.1	16	7.4	6.7
20 CHEROKEE	0	0.0	7	6.4	5.7
21 CHOWAN	0	0.0	10	14.2	11.8
22 CLAY	0	0.0	5	12.9	8.4
23 CLEVELAND	10	11.0	65	14.6	13.0
24 COLUMBUS	10	19.3	33	12.9	11.2
25 CRAVEN	5	5.7	43	10.0	10.2
26 CUMBERLAND	13	4.4	102	7.0	8.6
27 CURRITUCK	0	0.0	13	16.4	15.1
28 DARE	1	3.7	10	7.8	7.2
29 DAVIDSON	10	7.1	48	7.0	6.6
30 DAVIE	2	6.4	14	9.3	7.7
31 DUPLIN	4	9.1	20	9.4	8.3
32 DURHAM	15	7.6	70	7.2	7.9
33 EDGECOMBE	4	7.2	45	16.0	15.5
34 FORSYTH	25	8.7	120	8.6	8.1
35 FRANKLIN	3	6.9	25	12.0	11.7
36 GASTON	33	18.3	129	14.4	13.7
37 GATES	0	0.0	1	2.0	1.6
38 GRAHAM	0	0.0	1	2.7	2.1
39 GRANVILLE	4	9.3	18	8.7	8.2
40 GREENE	2	11.3	9	10.7	9.7
41 GUILFORD	41	10.7	179	9.6	9.2
42 HALIFAX	4	7.2	47	16.5	15.7
43 HARNETT	4	4.9	36	9.3	9.5
44 HAYWOOD	7	13.7	37	14.8	10.6
45 HENDERSON	8	10.1	38	10.0	7.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
CHRONIC LIVER DISEASE AND CIRRHOsis, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	3	13.7	16	14.3	13.1
47 HOKE	2	6.9	8	5.9	6.2
48 HYDE	3	56.8	5	19.0	15.2
49 IREDELL	9	8.2	47	9.1	8.2
50 JACKSON	3	10.3	16	11.2	9.5
51 JOHNSTON	6	5.8	43	9.0	8.4
52 JONES	2	22.3	3	6.4	5.3
53 LEE	3	6.2	18	7.8	7.2
54 LENOIR	6	10.2	37	12.6	11.1
55 LINCOLN	6	10.4	32	11.5	11.1
56 McDOWELL	7	17.8	26	13.8	11.5
57 MACON	5	18.1	9	6.8	5.3
58 MADISON	6	32.7	15	16.8	13.8
59 MARTIN	2	7.8	11	8.5	7.2
60 MECKLENBURG	40	6.6	225	7.8	8.6
61 MITCHELL	3	20.4	4	5.5	3.9
62 MONTGOMERY	2	8.2	7	5.8	5.5
63 MOORE	8	11.5	34	10.2	7.3
64 NASH	13	14.9	49	11.6	11.0
65 NEW HANOVER	16	10.9	80	11.5	10.5
66 NORTHAMPTON	4	19.2	14	13.5	10.5
67 ONSLOW	10	6.8	37	5.0	9.0
68 ORANGE	4	3.7	24	4.6	5.4
69 PAMLICO	1	8.4	6	10.1	8.1
70 PASQUOTANK	1	2.9	10	6.0	5.9
71 PENDER	5	13.4	19	10.9	9.5
72 PERQUIMANS	1	9.2	7	13.1	9.5
73 PERSON	3	9.1	22	13.8	12.3
74 PITT	13	10.5	59	10.0	11.4
75 POLK	0	0.0	10	12.6	9.7
76 RANDOLPH	6	4.9	36	6.2	5.8
77 RICHMOND	4	8.8	28	12.3	11.0
78 ROBESON	15	13.3	62	11.2	11.9
79 ROCKINGHAM	10	11.2	51	11.6	9.8
80 ROWAN	18	14.7	51	8.6	7.6
81 RUTHERFORD	10	16.8	38	12.9	11.0
82 SAMPSON	6	11.4	35	13.8	12.3
83 SCOTLAND	6	17.1	26	15.0	15.3
84 STANLY	6	10.9	22	8.1	7.2
85 STOKES	4	9.3	10	4.9	4.6
86 SURRY	6	9.0	26	8.0	6.8
87 SWAIN	0	0.0	8	13.7	11.4
88 TRANSYLVANIA	1	3.6	13	9.5	7.5
89 TYRRELL	0	0.0	1	5.3	4.8
90 UNION	4	3.8	30	6.1	6.4
91 VANCE	3	7.3	29	14.4	13.8
92 WAKE	32	5.7	143	5.5	6.8
93 WARREN	2	11.0	13	14.5	11.9
94 WASHINGTON	1	7.5	2	2.9	2.6
95 WATAUGA	1	2.4	5	2.5	2.8
96 WAYNE	19	16.8	60	10.8	10.9
97 WILKES	4	6.3	20	6.5	5.3
98 WILSON	11	16.0	54	15.9	14.7
99 YADKIN	1	2.8	8	4.7	3.9
100 YANCEY	1	6.1	9	11.2	8.3

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Chronic Liver Disease and Cirrhosis

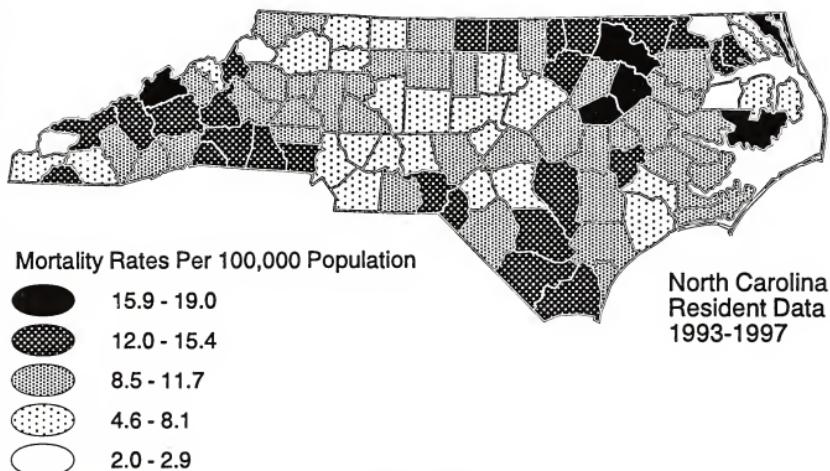


Figure 19.A

Chronic Liver Disease and Cirrhosis

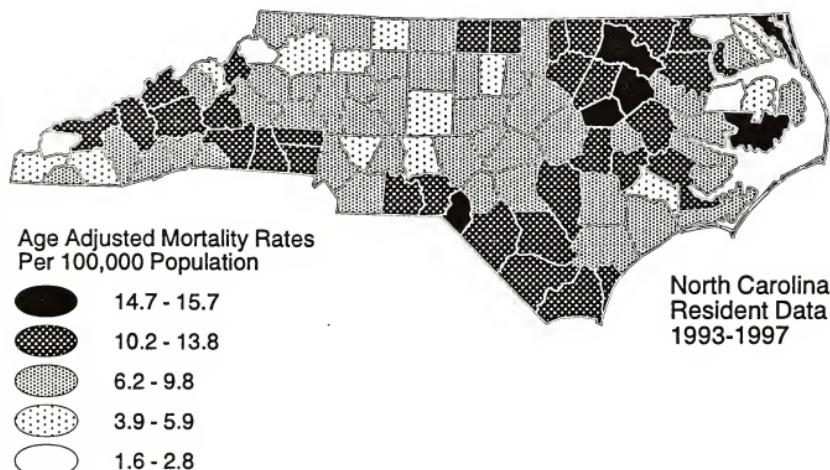


Figure 19.B

TABLE -20
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
NEPHRITIS AND NEPHROSIS

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	688	9.3	3295	9.2	8.5
COUNTIES					
1 ALAMANCE	9	7.5	48	8.3	6.5
2 ALEXANDER	2	6.4	20	13.3	12.9
3 ALLEGHANY	1	10.3	4	8.3	4.8
4 ANSON	7	29.3	24	20.1	15.0
5 ASHE	0	0.0	15	13.0	7.7
6 AVERY	2	12.9	12	15.8	11.7
7 BEAUFORT	2	4.6	20	9.3	7.0
8 BERTIE	4	19.8	16	15.6	12.5*
9 BLADEN	7	23.1	25	16.8	13.4
10 BRUNSWICK	8	12.3	21	6.9	6.5
11 BUNCOMBE	27	14.1	106	11.3	7.8
12 BURKE	8	9.6	31	7.7	6.5
13 CABARRUS	17	14.6	59	10.7	9.3
14 CALDWELL	5	6.7	31	8.4	7.5
15 CAMDEN	0	0.0	3	9.6	8.3
16 CARTERET	8	13.5	22	7.6	6.3
17 CASWELL	2	9.1	9	8.4	6.4
18 CATAWBA	21	16.2	87	13.8	12.9
19 CHATHAM	2	4.4	13	6.0	4.8
20 CHEROKEE	7	31.2	20	18.4	11.4
21 CHOWAN	1	7.0	9	12.8	8.1
22 CLAY	0	0.0	3	7.8	4.0
23 CLEVELAND	10	11.0	40	9.0	7.5
24 COLUMBUS	9	17.3	36	14.0	12.1
25 CRAVEN	7	7.9	35	8.2	8.2
26 CUMBERLAND	18	6.1	76	5.2	8.3
27 CURRITUCK	0	0.0	3	3.8	3.8
28 DARE	0	0.0	7	5.4	5.7
29 DAVIDSON	22	15.7	76	11.1	10.4
30 DAVIE	5	16.0	25	16.7	12.8
31 DUPLIN	6	13.6	34	15.9	12.9
32 DURHAM	25	12.6	128	13.2	14.1
33 EDGECOMBE	5	9.0	32	11.4	10.5
34 FORSYTH	32	11.1	154	11.0	9.7
35 FRANKLIN	7	16.1	24	11.5	10.2
36 GASTON	15	8.3	93	10.4	9.8
37 GATES	2	20.2	9	18.4	15.5
38 GRAHAM	0	0.0	3	8.1	5.4
39 GRANVILLE	4	9.3	30	14.5	13.7
40 GREENE	1	5.7	6	7.1	6.4
41 GUILFORD	24	6.3	125	6.7	6.2
42 HALIFAX	9	16.1	33	11.6	9.8
43 HARNETT	3	3.7	30	7.8	7.7
44 HAYWOOD	6	11.7	27	10.8	6.5
45 HENDERSON	10	12.6	49	12.8	6.6

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
NEPHRITIS AND NEPHROSIS, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	5	22.8	16	14.3	11.2
47 HOKE	0	0.0	11	8.1	9.8
48 HYDE	0	0.0	3	11.4	9.5
49 IREDELL	7	6.4	47	9.1	8.0
50 JACKSON	2	6.9	12	8.4	6.7
51 JOHNSTON	12	11.6	56	11.7	11.2
52 JONES	1	11.1	12	25.6	21.1
53 LEE	5	10.3	27	11.7	10.4
54 LENOIR	18	30.5	57	19.3	16.0
55 LINCOLN	6	10.4	28	10.1	9.7
56 MCDOWELL	1	2.5	16	8.5	6.6
57 MACON	3	10.8	9	6.8	3.2
58 MADISON	0	0.0	5	5.6	3.9
59 MARTIN	4	15.6	16	12.4	10.0
60 MECKLENBURG	34	5.6	183	6.3	7.6
61 MITCHELL	2	13.6	8	10.9	5.7
62 MONTGOMERY	2	8.2	16	13.4	11.7
63 MOORE	1	1.4	28	8.4	4.5
64 NASH	5	5.7	39	9.3	8.8
65 NEW HANOVER	11	7.5	74	10.6	9.7
66 NORTHAMPTON	1	4.8	11	10.6	7.1
67 ONSLOW	6	4.1	27	3.6	8.3
68 ORANGE	6	5.6	35	6.7	8.7
69 PAMLICO	3	25.1	8	13.5	8.5
70 PASQUOTANK	3	8.7	19	11.3	8.9
71 PENDER	5	13.4	22	12.6	10.9
72 PERQUIMANS	0	0.0	3	5.6	4.2
73 PERSON	3	9.1	19	11.9	9.0
74 PITTS	8	6.4	55	9.3	10.9
75 POLK	4	24.4	9	11.4	4.9
76 RANDOLPH	4	3.3	38	6.5	6.0
77 RICHMOND	6	13.1	32	14.1	12.2
78 ROBESON	10	8.9	60	10.8	11.8
79 ROCKINGHAM	9	10.1	58	13.1	10.2
80 ROWAN	13	10.6	57	9.6	7.0
81 RUTHERFORD	8	13.5	28	9.5	6.8
82 SAMPSON	4	7.6	31	12.2	9.7
83 SCOTLAND	9	25.7	23	13.2	13.9
84 STANLY	3	5.4	16	5.9	4.6
85 STOKES	5	11.7	16	7.8	7.4
86 SURRY	9	13.5	45	13.8	10.1
87 SWAIN	5	41.7	9	15.4	11.3
88 TRANSLVANIA	1	3.6	7	5.1	3.0
89 TYRRELL	1	27.2	1	5.3	4.1
90 UNION	7	6.6	38	7.7	9.3
91 VANCE	4	9.8	22	10.9	10.4
92 WAKE	30	5.4	131	5.1	7.1
93 WARREN	4	22.1	11	12.2	7.2
94 WASHINGTON	1	7.5	6	8.8	7.1
95 WATAUGA	3	7.3	11	5.5	5.7
96 WAYNE	11	9.7	41	7.4	8.2
97 WILKES	10	15.8	36	11.6	9.5
98 WILSON	6	8.7	13	3.8	3.5
99 YADKIN	5	14.2	16	9.5	7.0
100 YANCEY	2	12.2	5	6.2	4.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Nephritis and Nephrosis

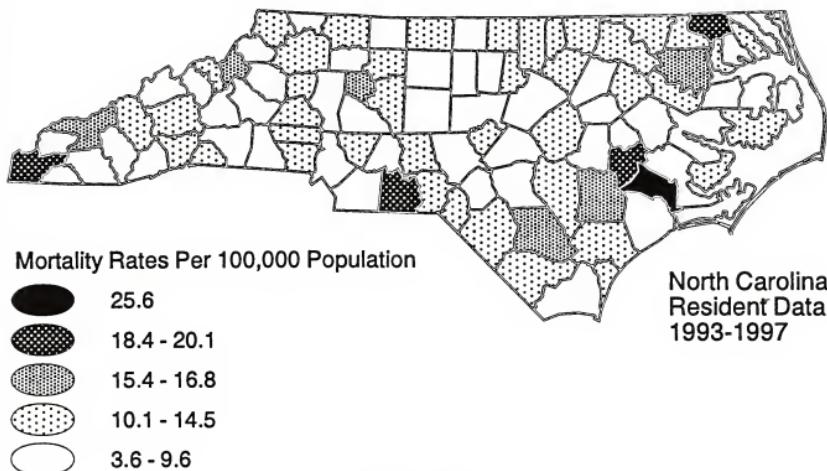


Figure 20.A

Nephritis and Nephrosis

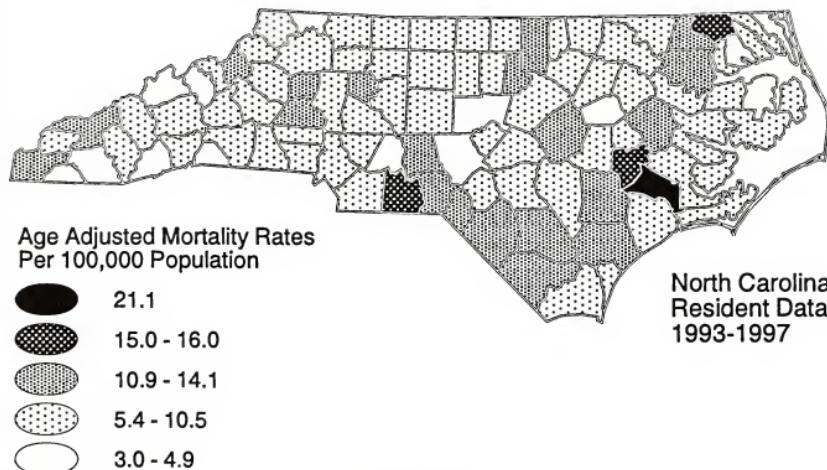


Figure 20.B

TABLE - 21
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
UNINTENTIONAL MOTOR VEHICLE INJURIES

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	1530	20.6	7390	20.5	20.8

COUNTIES

1 ALAMANCE	15	12.5	90	15.5	15.3
2 ALEXANDER	6	19.3	36	23.9	25.3
3 ALLEGHANY	2	20.7	10	20.8	22.5
4 ANSON	14	58.7	47	39.4	40.4
5 ASHE	5	21.2	23	19.9	19.7
6 AVERY	2	12.9	5	6.6	6.0
7 BEAUFORT	14	32.3	56	25.9	26.1
8 BERTIE	7	34.6	31	30.3	30.2 ^a
9 BLADEN	10	33.0	55	36.9	36.5
10 BRUNSWICK	16	24.5	90	29.6	31.2
11 BUNCOMBE	24	12.6	149	15.9	16.3
12 BURKE	18	21.6	83	20.5	21.2
13 CABARRUS	14	12.0	78	14.1	14.6
14 CALDWELL	14	18.7	74	20.1	21.2
15 CAMDEN	2	31.7	9	28.8	28.5
16 CARTERET	15	25.4	63	21.9	23.2
17 CASWELL	1	4.5	32	29.8	29.5
18 CATAWBA	33	25.5	142	22.5	23.1
19 CHATHAM	16	35.5	67	31.1	33.1
20 CHEROKEE	3	13.4	17	15.6	14.3
21 CHOWAN	5	35.2	19	27.0	24.4
22 CLAY	4	49.6	10	25.9	26.3
23 CLEVELAND	23	25.4	97	21.8	22.9
24 COLUMBUS	21	40.4	96	37.4	37.0
25 CRAVEN	10	11.3	78	18.2	18.5
26 CUMBERLAND	54	18.3	298	20.3	20.6
27 CURRITUCK	5	30.2	24	30.4	30.3
28 DARE	4	14.6	21	16.3	17.8
29 DAVIDSON	17	12.1	132	19.3	19.6
30 DAVIE	5	16.0	33	22.0	22.4
31 DUPLIN	23	52.2	94	44.0	45.6
32 DURHAM	34	17.2	127	13.1	12.9
33 EDGECOMBE	18	32.5	76	27.0	28.9
34 FORSYTH	38	13.2	183	13.1	13.5
35 FRANKLIN	16	36.8	72	34.6	35.1
36 GASTON	31	17.2	161	18.0	18.8
37 GATES	4	40.3	21	42.9	43.0
38 GRAHAM	4	53.3	11	29.5	27.1
39 GRANVILLE	12	28.0	55	26.6	27.2
40 GREENE	8	45.3	27	32.1	33.4
41 GUILFORD	63	16.4	316	17.0	16.9
42 HALIFAX	14	25.1	86	30.3	31.5
43 HARNETT	24	29.5	115	29.8	30.2
44 HAYWOOD	7	13.7	35	14.0	14.6
45 HENDERSON	14	17.7	76	19.9	21.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
UNINTENTIONAL MOTOR VEHICLE INJURIES, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	3	13.7	30	26.9	28.1
47 HOKE	11	38.1	47	34.6	34.7
48 HYDE	0	0.0	6	22.8	24.9
49 IREDELL	25	22.9	106	20.4	21.2
50 JACKSON	6	20.6	28	19.5	18.4
51 JOHNSTON	28	27.1	143	29.9	30.8
52 JONES	3	33.4	14	29.9	30.3
53 LEE	16	33.1	58	25.2	26.5
54 LENOIR	10	16.9	57	19.3	19.9
55 LINCOLN	13	22.5	75	26.9	27.8
56 MCDOWELL	5	12.7	48	25.5	26.2
57 MACON	11	39.8	33	25.1	23.7
58 MADISON	2	10.9	22	24.7	22.1
59 MARTIN	1	3.9	31	24.0	26.4
60 MECKLENBURG	71	11.7	356	12.3	12.6
61 MITCHELL	1	6.8	16	21.9	22.3
62 MONTGOMERY	9	36.8	39	32.5	33.6
63 MOORE	14	20.1	73	22.0	24.6
64 NASH	19	21.8	109	25.9	26.8
65 NEW HANOVER	18	12.3	73	10.5	10.4
66 NORTHAMPTON	7	33.7	30	29.0	29.5
67 ONSLOW	34	23.1	166	22.4	22.2
68 ORANGE	12	11.2	74	14.1	14.0
69 PAMlico	2	16.7	15	25.3	27.1
70 PASQUOTANK	4	11.6	26	15.5	16.1
71 PENDER	13	34.9	47	27.0	28.4
72 PERQUIMANS	7	64.2	19	35.6	34.0
73 PERSON	13	39.5	44	27.5	26.6
74 PITT	25	20.1	125	21.1	21.4
75 POLK	1	6.1	17	21.5	20.5
76 RANDOLPH	30	24.7	135	23.3	24.3
77 RICHMOND	20	43.8	85	37.4	38.7
78 ROBESON	57	50.6	226	40.8	42.4
79 ROCKINGHAM	21	23.6	118	26.7	28.0
80 ROWAN	27	22.0	118	19.9	20.0
81 RUTHERFORD	15	25.3	80	27.2	27.6
82 SAMPSON	33	62.7	112	44.1	45.1
83 SCOTLAND	10	28.6	59	33.9	35.8
84 STANLY	9	16.3	54	20.0	20.1
85 STOKES	4	9.3	31	15.1	15.6
86 SURRY	14	20.9	75	23.0	23.3
87 SWAIN	2	16.7	19	32.6	35.3
88 TRANSYLVANIA	3	10.8	13	9.5	9.4
89 TYRRELL	1	27.2	5	26.6	31.8
90 UNION	24	22.6	136	27.6	29.2
91 VANCE	12	29.3	42	20.9	21.7
92 WAKE	73	13.1	318	12.3	12.8
93 WARREN	8	44.1	30	33.4	34.4
94 WASHINGTON	11	82.7	25	36.6	37.6
95 WATAUGA	3	7.3	20	10.0	10.2
96 WAYNE	26	23.0	119	21.5	22.2
97 WILKES	22	34.9	80	25.8	26.2
98 WILSON	17	24.7	83	24.5	25.2
99 YADKIN	10	28.4	44	26.1	26.3
100 YANCEY	5	30.6	16	19.9	18.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Motor Vehicle Injuries

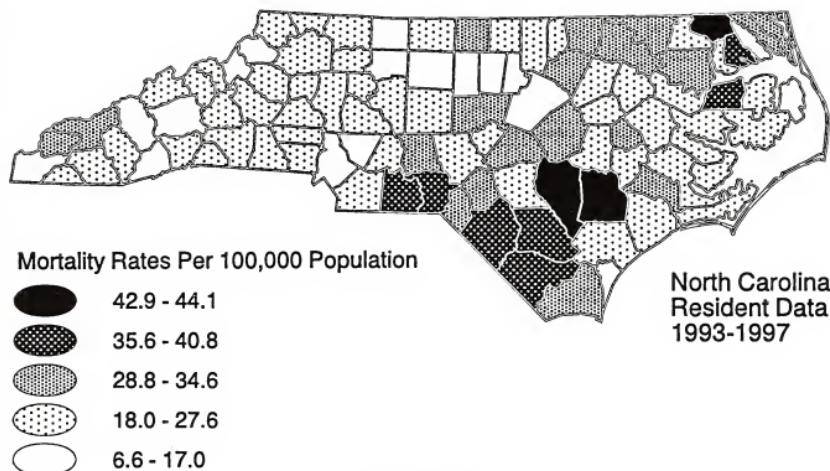


Figure 21.A

Motor Vehicle Injuries

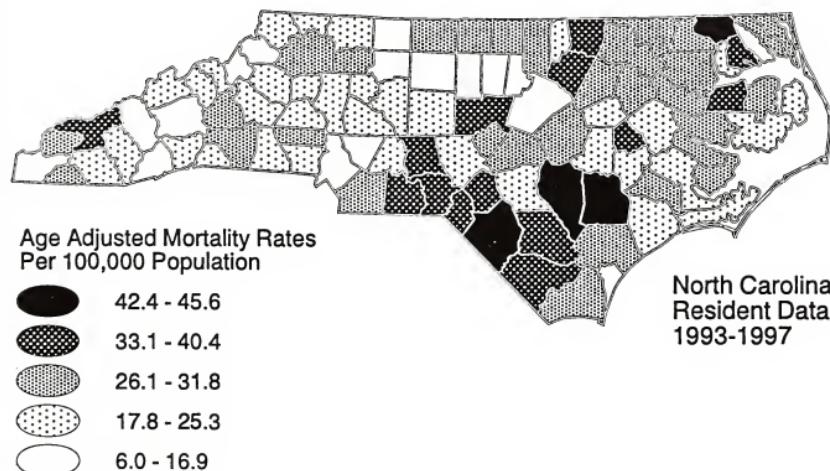


Figure 21.B

TABLE - 22
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
ALL OTHER UNINTENTIONAL INJURIES

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	1481	19.9	7421	20.6	19.8
COUNTIES					
1 ALAMANCE	28	23.4	120	20.7	18.2
2 ALEXANDER	8	25.7	46	30.6	31.0
3 ALLEGHANY	3	31.0	16	33.2	21.4
4 ANSON	9	37.7	27	22.6	20.0
5 ASHE	1	4.2	25	21.6	16.2
6 AVERY	5	32.3	23	30.3	24.5
7 BEAUFORT	10	23.0	57	26.4	23.2
8 BERTIE	5	24.7	28	27.3	25.4
9 BLADEN	5	16.5	42	28.2	25.9
10 BRUNSWICK	16	24.5	72	23.7	22.2
11 BUNCOMBE	38	19.9	211	22.5	18.4
12 BURKE	17	20.4	89	22.0	20.1
13 CABARRUS	18	15.5	105	19.0	18.0
14 CALDWELL	15	20.1	68	18.5	17.3
15 CAMDEN	2	31.7	6	19.2	17.0
16 CARTERET	10	16.9	83	28.9	26.2
17 CASWELL	3	13.6	27	25.2	22.1
18 CATAVBA	24	18.5	124	19.7	18.9
19 CHATHAM	7	15.5	41	19.0	15.1
20 CHEROKEE	12	53.5	35	32.2	27.1
21 CHOWAN	6	42.2	21	29.9	24.3
22 CLAY	3	37.2	9	23.3	16.0
23 CLEVELAND	24	26.5	104	23.4	21.1
24 COLUMBUS	22	42.4	77	30.0	27.9
25 CRAVEN	11	12.4	81	18.9	19.2
26 CUMBERLAND	54	18.3	258	17.6	21.9
27 CURRITUCK	3	18.1	13	16.4	17.4
28 DARE	4	14.6	26	20.2	20.8
29 DAVIDSON	25	17.8	129	18.9	18.1
30 DAVIE	8	25.6	30	20.0	16.9
31 DUPLIN	9	20.4	48	22.4	20.7
32 DURHAM	52	26.3	226	23.4	23.7
33 EDGECOMBE	11	19.9	66	23.5	23.5
34 FORSYTH	47	16.4	278	19.9	17.9
35 FRANKLIN	8	18.4	34	16.4	14.7
36 GASTON	39	21.7	174	19.5	19.0
37 GATES	3	30.3	12	24.5	22.0
38 GRAHAM	1	13.3	7	18.8	18.5
39 GRANVILLE	9	21.0	42	20.3	20.3
40 GREENE	3	17.0	19	22.6	22.1
41 GUILFORD	77	20.1	395	21.2	19.9
42 HALIFAX	13	23.3	63	22.2	20.6
43 HARNETT	19	23.4	81	21.0	21.1
44 HAYWOOD	12	23.4	66	26.4	19.4
45 HENDERSON	27	34.1	95	24.9	17.9

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
ALL OTHER UNINTENTIONAL MOTOR VEHICLE INJURIES, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	3	13.7	33	29.6	27.1
47 HOKE	5	17.3	38	28.0	30.8
48 HYDE	0	0.0	5	19.0	14.2
49 IREDELL	22	20.1	115	22.2	20.6
50 JACKSON	4	13.7	34	23.7	21.5
51 JOHNSTON	22	21.3	112	23.4	23.1
52 JONES	0	0.0	13	27.7	23.0
53 LEE	14	28.9	56	24.3	23.4
54 LENOIR	15	25.4	78	26.5	25.4
55 LINCOLN	10	17.3	58	20.8	20.7
56 MCDOWELL	7	17.8	46	24.5	22.2
57 MACON	8	28.9	38	28.9	20.2
58 MADISON	3	16.4	25	28.0	21.5
59 MARTIN	3	11.7	35	27.1	23.9
60 MECKLENBURG	96	15.8	449	15.5	16.9
61 MITCHELL	1	6.8	20	27.4	23.4
62 MONTGOMERY	3	12.3	32	26.7	24.8
63 MOORE	18	25.9	80	24.1	19.7
64 NASH	10	11.5	73	17.3	16.7
65 NEW HANOVER	27	18.4	122	17.5	16.9
66 NORTHAMPTON	5	24.0	28	27.0	22.8
67 ONSLOW	18	12.2	101	13.6	18.8
68 ORANGE	13	12.1	67	12.7	14.6
69 PAMLICO	7	58.5	17	28.7	25.0
70 PASQUOTANK	7	20.3	53	31.6	30.0
71 PENDER	9	24.2	40	23.0	21.9
72 PERQUIMANS	3	27.5	18	33.7	28.0
73 PERSON	8	24.3	43	26.9	24.1
74 PITTS	15	12.1	122	20.6	22.7
75 POLK	2	12.2	18	22.8	13.9
76 RANDOLPH	26	21.4	110	18.9	18.2
77 RICHMOND	12	26.3	45	19.8	19.5
78 ROBESON	20	17.7	146	26.3	27.8
79 ROCKINGHAM	29	32.5	100	22.7	19.9
80 ROWAN	23	18.7	123	20.7	17.6
81 RUTHERFORD	18	30.3	76	25.8	22.1
82 SAMPSON	17	32.3	62	24.4	23.4
83 SCOTLAND	7	20.0	38	21.9	22.6
84 STANLY	14	25.4	56	20.7	18.8
85 STOKES	8	18.7	51	24.8	24.8
86 SURRY	20	29.9	88	27.0	22.3
87 SWAIN	3	25.0	28	48.0	38.9
88 TRANSLVANIA	4	14.4	20	14.7	10.5
89 TYRRELL	1	27.2	2	10.6	10.1
90 UNION	13	12.3	79	16.1	17.3
91 VANCE	13	31.7	65	32.3	30.4
92 WAKE	76	13.6	351	13.6	16.0
93 WARREN	7	38.6	26	28.9	25.0
94 WASHINGTON	5	37.6	12	17.6	16.6
95 WATAUGA	5	12.2	27	13.5	14.3
96 WAYNE	28	24.7	127	22.9	23.7
97 WILKES	12	19.0	77	24.8	21.9
98 WILSON	19	27.6	83	24.5	23.3
99 YADKIN	12	34.1	39	23.1	19.4
100 YANCEY	5	30.6	22	27.3	19.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

All Other Injuries and Adverse Effects

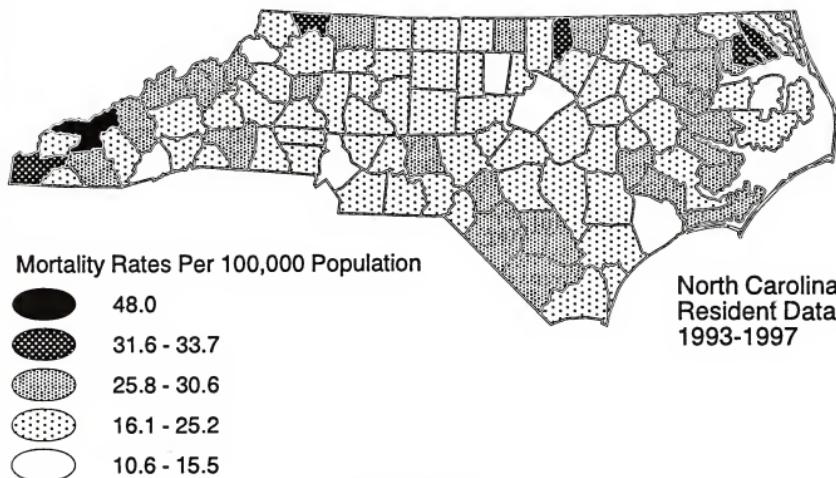


Figure 22.A

All Other Injuries and Adverse Effects

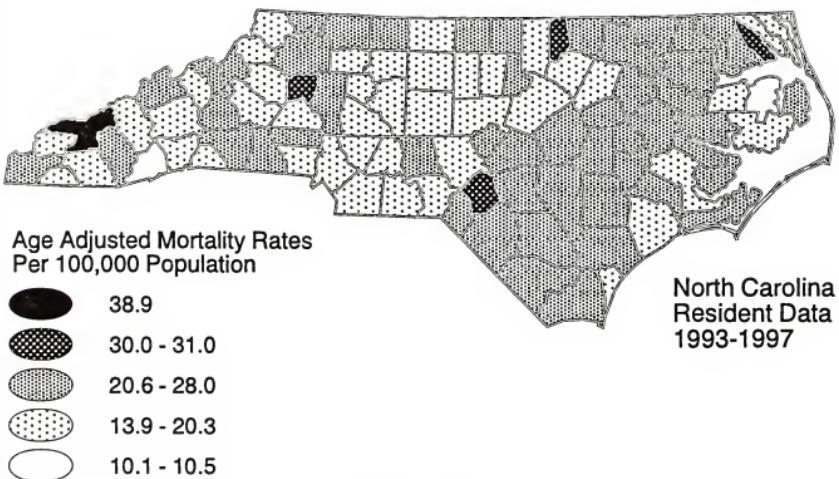


Figure 22.B

TABLE - 23
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
SUICIDE

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	901	12.1	4435	12.3	12.3

COUNTIES

1 ALAMANCE	15	12.5	94	16.2	16.1
2 ALEXANDER	7	22.5	26	17.3	17.1
3 ALLEGHANY	2	20.7	9	18.7	20.1
4 ANSON	3	12.6	19	15.9	15.5
5 ASHE	2	8.5	24	20.8	20.4
6 AVERY	7	45.3	20	26.3	23.7
7 BEAUFORT	4	9.2	29	13.4	12.8
8 BERTIE	1	4.9	4	3.9	3.6
9 BLADEF	2	6.6	17	11.4	11.4
10 BRUNSWICK	17	26.1	55	18.1	18.4
11 BUNCOMBE	28	14.7	144	15.3	14.8
12 BURKE	8	9.6	63	15.6	14.8
13 CABARRUS	13	11.2	68	12.3	12.5
14 CALDWELL	11	14.7	50	13.6	13.4
15 CAMDEN	2	31.7	5	16.0	16.3
16 CARTERET	9	15.2	34	11.8	12.1
17 CASWELL	5	22.7	15	14.0	14.5
18 CATAWBA	11	8.5	73	11.6	11.4
19 CHATHAM	7	15.5	29	13.5	13.0
20 CHEROKEE	3	13.4	15	13.8	14.1
21 CHOWAN	1	7.0	3	4.3	3.0
22 CLAY	1	12.4	5	12.9	11.2
23 CLEVELAND	15	16.5	55	12.4	11.8
24 COLUMBUS	6	11.6	31	12.1	12.1
25 CRAVEN	9	10.2	48	11.2	11.4
26 CUMBERLAND	26	8.8	181	12.3	13.3
27 CURRITUCK	2	12.1	15	19.0	19.3
28 DARE	4	14.6	15	11.7	11.1
29 DAVIDSON	17	12.1	90	13.2	12.8
30 DAVIE	5	16.0	20	13.4	12.8
31 DUPLIN	5	11.3	23	10.8	10.3
32 DURHAM	17	8.6	106	11.0	11.1
33 EDGECOMBE	5	9.0	27	9.6	9.8
34 FORSYTH	29	10.1	165	11.8	11.8
35 FRANKLIN	5	11.5	37	17.8	17.7
36 GASTON	22	12.2	117	13.1	13.4
37 GATES	1	10.1	6	12.3	12.5
38 GRAHAM	1	13.3	5	13.4	11.8
39 GRANVILLE	7	16.4	33	16.0	16.0
40 GREENE	4	22.7	12	14.3	13.6
41 GUILFORD	52	13.6	212	11.4	11.3
42 HALIFAX	7	12.5	29	10.2	10.2
43 HARNETT	13	16.0	57	14.8	14.9
44 HAYWOOD	10	19.5	35	14.0	13.9
45 HENDERSON	9	11.4	71	18.6	16.4

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
SUICIDE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	0	0.0	8	7.2	7.9
47 HOKE	4	13.8	15	11.0	11.9
48 HYDE	0	0.0	4	15.2	14.2
49 IREDELL	15	13.7	72	13.9	13.8
50 JACKSON	4	13.7	16	11.2	10.3
51 JOHNSTON	14	13.6	76	15.9	15.8
52 JONES	1	11.1	5	10.7	11.7
53 LEE	4	8.3	25	10.8	11.1
54 LENOIR	11	18.6	37	12.6	12.4
55 LINCOLN	10	17.3	40	14.4	14.0
56 MCDOWELL	3	7.6	16	8.5	8.4
57 MACON	3	10.8	24	18.2	15.9
58 MADISON	4	21.8	15	16.8	14.5
59 MARTIN	1	3.9	13	10.1	10.4
60 MECKLENBURG	65	10.7	291	10.1	10.2
61 MITCHELL	2	13.6	11	15.0	13.6
62 MONTGOMERY	0	0.0	20	16.7	17.6
63 MOORE	11	15.8	51	15.4	14.6
64 NASH	10	11.5	49	11.6	12.1
65 NEW HANOVER	18	12.3	92	13.2	13.1
66 NORTHAMPTON	3	14.4	6	5.8	5.4
67 ONSLOW	16	10.9	74	10.0	10.7
68 ORANGE	11	10.3	55	10.5	10.2
69 PAMLICO	3	25.1	10	16.9	14.6
70 PASQUOTANK	2	5.8	17	10.1	10.2
71 PENDER	3	8.1	27	15.5	16.4
72 PERQUIMANS	4	36.7	8	15.0	14.5
73 PERSON	2	6.1	23	14.4	14.1
74 PITTS	11	8.8	66	11.2	11.7
75 POLK	3	18.3	18	22.8	19.8
76 RANDOLPH	17	14.0	68	11.7	11.6
77 RICHMOND	9	19.7	38	16.7	16.8
78 ROBESON	12	10.6	56	10.1	10.6
79 ROCKINGHAM	6	6.7	49	11.1	11.2
80 ROWAN	21	17.1	83	14.0	14.0
81 RUTHERFORD	14	23.6	51	17.3	17.2
82 SAMPSON	3	5.7	26	10.2	10.8
83 SCOTLAND	3	8.6	11	6.3	6.4
84 STANLY	9	16.3	41	15.2	15.2
85 STOKES	13	30.3	48	23.4	23.3
86 SURRY	16	23.9	49	15.0	13.4
87 SWAIN	3	25.0	6	10.3	11.8
88 TRANSYLVANIA	5	18.0	19	13.9	13.3
89 TYRRELL	1	27.2	1	5.3	3.1
90 UNION	7	6.6	53	10.8	11.0
91 VANCE	3	7.3	14	7.0	7.3
92 WAKE	42	7.5	227	8.8	9.0
93 WARREN	2	11.0	10	11.1	9.6
94 WASHINGTON	0	0.0	7	10.2	10.3
95 WATAUGA	6	14.7	28	14.1	15.3
96 WAYNE	13	11.5	56	10.1	10.4
97 WILKES	11	17.4	43	13.9	12.9
98 WILSON	12	17.5	47	13.8	13.9
99 YADKIN	4	11.4	24	14.2	14.5
100 YANCEY	1	6.1	5	6.2	6.7

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Suicide

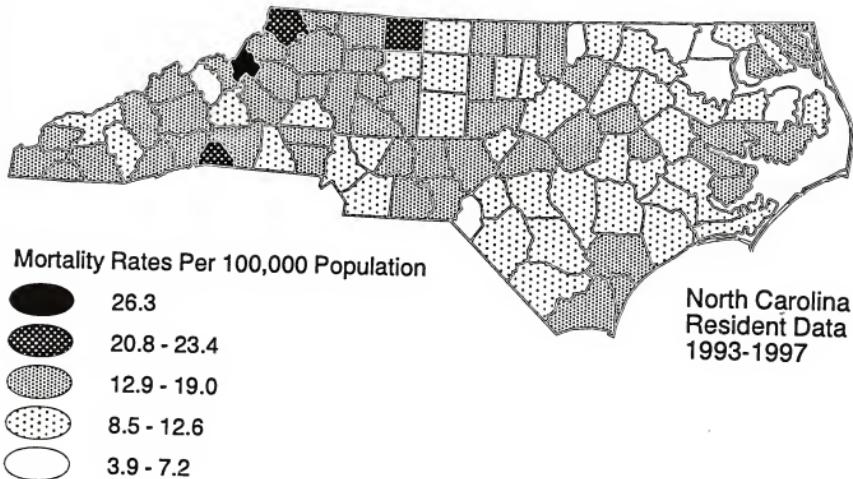


Figure 23.A

Suicide

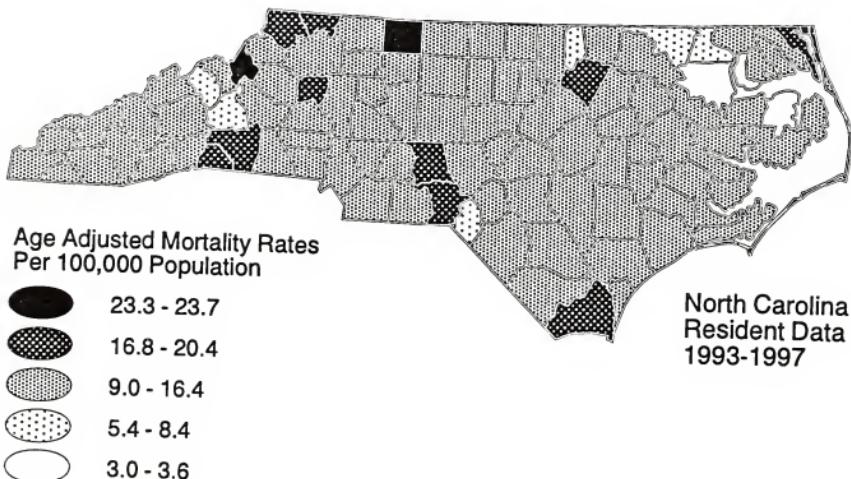


Figure 23.B

TABLE - 24
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
HOMICIDE

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	671	9.0	3726	10.4	10.6

COUNTIES

1 ALAMANCE	6	5.0	46	7.9	8.2
2 ALEXANDER	2	6.4	13	8.6	8.7
3 ALLEGHENY	1	10.3	2	4.2	5.6
4 ANSON	3	12.6	26	21.8	23.3
5 ASHE	0	0.0	6	5.2	5.5
6 AVERY	2	12.9	3	3.9	4.2
7 BEAUFORT	6	13.8	22	10.2	11.9
8 BERTIE	2	9.9	21	20.5	22.5
9 BLADEN	1	3.3	22	14.8	15.7
10 BRUNSWICK	5	7.7	26	8.6	9.0
11 BUNCOMBE	12	6.3	77	8.2	9.0
12 BURKE	5	6.0	23	5.7	5.9
13 CABARRUS	7	6.0	34	6.2	6.1
14 CALDWELL	4	5.4	35	9.5	9.9
15 CAMDEN	0	0.0	2	6.4	8.1
16 CARTERET	3	5.1	18	6.3	6.8
17 CASWELL	2	9.1	21	19.6	19.0
18 CATAWBA	9	6.9	49	7.8	8.3
19 CHATHAM	3	6.6	28	13.0	14.3
20 CHEROKEE	2	8.9	8	7.4	6.9
21 CHOWAN	0	0.0	4	5.7	5.7
22 CLAY	1	12.4	3	7.8	8.7
23 CLEVELAND	16	17.7	71	16.0	17.3
24 COLUMBUS	9	17.3	30	11.7	12.1
25 CRAVEN	10	11.3	33	7.7	7.8
26 CUMBERLAND	41	13.9	245	16.7	16.2
27 CURRITUCK	0	0.0	4	5.1	5.1
28 DARE	1	3.7	3	2.3	2.5
29 DAVIDSON	4	2.8	41	6.0	6.2
30 DAVIE	2	6.4	9	6.0	7.2
31 DUPLIN	9	20.4	33	15.4	16.7
32 DURHAM	34	17.2	167	17.3	16.7
33 EDGECOMBE	5	9.0	44	15.6	17.0
34 FORSYTH	19	6.6	152	10.9	11.4
35 FRANKLIN	6	13.8	28	13.5	13.5
36 GASTON	24	13.3	132	14.8	15.4
37 GATES	0	0.0	1	2.0	2.0
38 GRAHAM	1	13.3	7	18.8	17.4
39 GRANVILLE	2	4.7	17	8.2	8.7
40 GREENE	0	0.0	8	9.5	10.5
41 GUILFORD	50	13.0	213	11.5	11.8
42 HALIFAX	10	17.9	37	13.0	14.3
43 HARNETT	16	19.7	52	13.5	13.7
44 HAYWOOD	1	2.0	10	4.0	4.1
45 HENDERSON	3	3.8	12	3.1	3.2

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
HOMICIDE, CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	1	4.6	11	9.9	11.2
47 HOKE	2	6.9	20	14.7	14.9
48 HYDE	0	0.0	2	7.6	7.9
49 IREDELL	11	10.1	49	9.5	10.1
50 JACKSON	4	13.7	6	4.2	4.4
51 JOHNSTON	5	4.8	38	7.9	8.6
52 JONES	1	11.1	3	6.4	7.5
53 LEE	3	6.2	29	12.6	13.7
54 LENOIR	7	11.9	39	13.2	14.4
55 LINCOLN	3	5.2	17	6.1	6.1
56 McDOWELL	5	12.7	13	6.9	6.8
57 MACON	0	0.0	4	3.0	2.1
58 MADISON	1	5.5	2	2.2	2.1
59 MARTIN	1	3.9	15	11.6	12.7
60 MECKLENBURG	60	9.9	434	15.0	15.0
61 MITCHELL	1	6.8	1	1.4	1.4
62 MONTGOMERY	3	12.3	13	10.8	11.6
63 MOORE	6	8.6	21	6.3	7.4
64 NASH	7	8.0	41	9.7	10.1
65 NEW HANOVER	14	9.5	46	6.6	6.8
66 NORTHAMPTON	5	24.0	16	15.5	14.8
67 ONSLOW	4	2.7	34	4.6	4.2
68 ORANGE	5	4.7	28	5.3	4.8
69 PAMLICO	0	0.0	2	3.4	4.8
70 PASQUOTANK	2	5.8	6	3.6	3.5
71 PENDER	1	2.7	13	7.5	7.8
72 PERQUIMANS	2	18.3	6	11.2	11.9
73 PERSON	0	0.0	5	3.1	3.1
74 PITTS	10	8.0	60	10.1	10.2
75 POLK	0	0.0	6	7.6	11.0
76 RANDOLPH	7	5.8	40	6.9	7.1
77 RICHMOND	7	15.3	51	22.5	24.6
78 ROBESON	28	24.8	131	23.6	25.1
79 ROCKINGHAM	4	4.5	38	8.6	9.3
80 ROWAN	13	10.6	49	8.2	8.6
81 RUTHERFORD	5	8.4	34	11.5	11.9
82 SAMPSON	3	5.7	45	17.7	19.1
83 SCOTLAND	9	25.7	34	19.6	21.0
84 STANLY	7	12.7	26	9.6	9.6
85 STOKES	6	14.0	14	6.8	6.9
86 SURRY	3	4.5	14	4.3	4.3
87 SWAIN	0	0.0	3	5.1	5.5
88 TRANSLYVANIA	1	3.6	2	1.5	1.7
89 TYRRELL	0	0.0	0	0.0	0.0
90 UNION	8	7.5	45	9.1	9.7
91 VANCE	6	14.6	37	18.4	20.0
92 WAKE	34	6.1	172	6.6	6.4
93 WARREN	0	0.0	3	3.3	4.6
94 WASHINGTON	0	0.0	6	8.8	9.8
95 WATAUGA	0	0.0	4	2.0	2.3
96 WAYNE	8	7.1	69	12.5	12.8
97 WILKES	5	7.9	23	7.4	7.4
98 WILSON	14	20.4	55	16.2	17.5
99 YADKIN	0	0.0	4	2.4	2.6
100 YANCEY	0	0.0	9	11.2	11.2

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

STATE CENTER FOR HEALTH STATISTICS
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Homicide

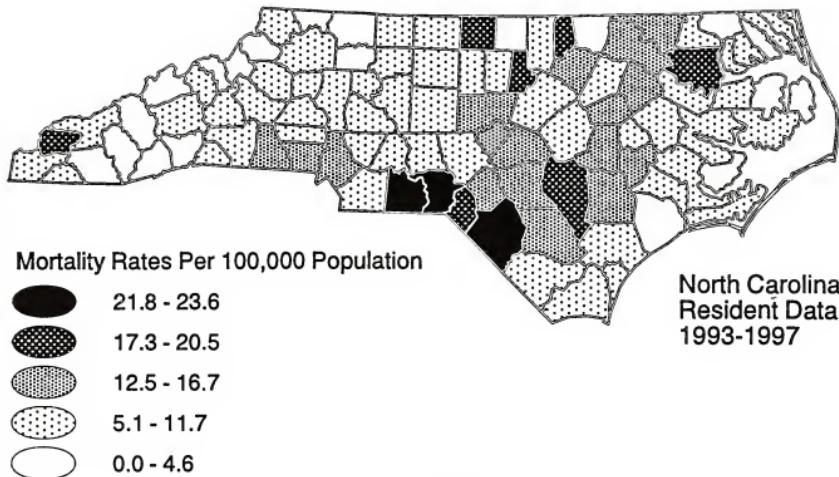


Figure 24.A

Homicide

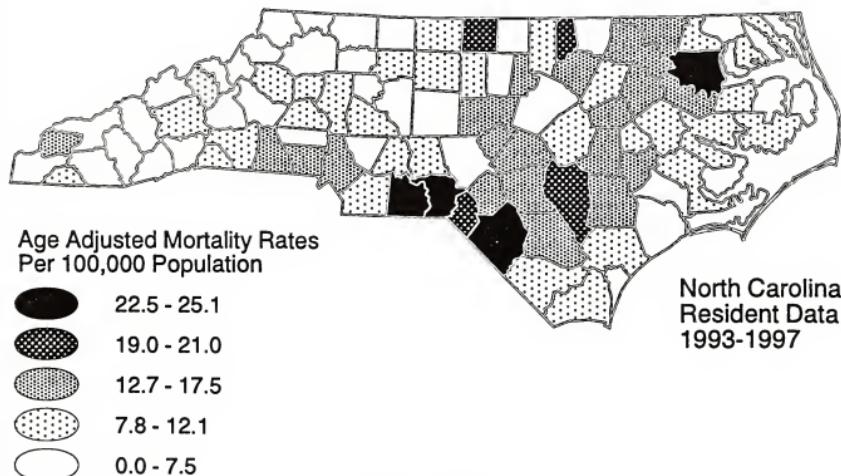


Figure 24.B

TABLE - 25
MORTALITY STATISTICS FOR 1997
NORTH CAROLINA RESIDENTS
INFANT DEATHS (PER 1,000 LIVE BIRTHS)

GEOGRAPHICAL AREA	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
NORTH CAROLINA	982	9.2	4975	9.6	0.0
COUNTIES					
1 ALAMANCE	18	10.4	66	8.7	0.0
2 ALEXANDER	2	4.6	16	8.2	0.0
3 ALLEGHANY	0	0.0	0	0.0	0.0
4 ANSON	3	9.0	16	9.3	0.0
5 ASHE	2	7.7	12	10.2	0.0
6 AVERY	0	0.0	13	14.2	0.0
7 BEAUFORT	5	9.0	33	11.8	0.0
8 BERTIE	2	7.4	13	9.3	0.0
9 BLADEN	3	6.5	26	12.2	0.0
10 BRUNSWICK	7	9.4	29	7.9	0.0
11 BUNCOMBE	19	8.4	97	8.5	0.0
12 BURKE	11	10.4	60	11.3	0.0
13 CABARRUS	8	4.8	43	5.7	0.0
14 CALDWELL	10	10.6	47	9.8	0.0
15 CAMDEN	1	32.3	5	17.4	0.0
16 CARTERET	4	6.4	26	8.3	0.0
17 CASWELL	1	4.0	16	13.3	0.0
18 CATAWBA	11	6.1	55	6.4	0.0
19 CHATHAM	5	8.4	29	10.4	0.0
20 CHEROKEE	1	3.6	10	8.0	0.0
21 CHOWAN	2	9.8	5	5.2	0.0
22 CLAY	0	0.0	1	3.0	0.0
23 CLEVELAND	15	11.9	64	10.0	0.0
24 COLUMBUS	5	6.4	48	13.0	0.0
25 CRAVEN	10	6.2	56	7.4	0.0
26 CUMBERLAND	58	10.5	303	10.7	0.0
27 CURRITUCK	1	6.3	14	16.0	0.0
28 DARE	2	6.6	6	4.1	0.0
29 DAVIDSON	14	8.1	70	8.0	0.0
30 DAVIE	4	10.5	17	9.7	0.0
31 DUPLIN	8	10.5	43	12.6	0.0
32 DURHAM	31	9.6	156	10.2	0.0
33 EDGECOMBE	4	4.9	50	11.4	0.0
34 FORSYTH	63	14.7	261	13.0	0.0
35 FRANKLIN	2	3.5	25	9.3	0.0
36 GASTON	18	6.9	112	8.9	0.0
37 GATES	0	0.0	3	5.6	0.0
38 GRAHAM	0	0.0	1	2.2	0.0
39 GRANVILLE	5	8.9	34	12.6	0.0
40 GREENE	2	8.6	18	17.6	0.0
41 GUILFORD	53	10.0	260	10.0	0.0
42 HALIFAX	10	13.0	62	15.2	0.0
43 HARNETT	13	9.5	61	9.4	0.0
44 HAYWOOD	4	7.2	22	8.2	0.0
45 HENDERSON	7	7.6	36	8.6	0.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

MORTALITY STATISTICS FOR 1997, NORTH CAROLINA RESIDENTS
INFANT DEATHS (PER 1,000 LIVE BIRTHS), CONT'D

COUNTIES (CONT'D)	NUMBER OF DEATHS 1997	DEATH RATE* 1997	NUMBER OF DEATHS 1993-1997	DEATH RATE* 1993-1997	ADJUSTED DEATH RATE* 1993-1997
46 HERTFORD	3	12.4	23	15.7	0.0
47 HOKE	4	7.5	30	12.0	0.0
48 HYDE	0	0.0	3	10.7	0.0
49 IREDELL	16	10.3	73	10.1	0.0
50 JACKSON	2	6.4	13	8.4	0.0
51 JOHNSTON	13	7.6	66	8.7	0.0
52 JONES	1	10.8	6	11.4	0.0
53 LEE	7	9.6	45	12.7	0.0
54 LENOIR	14	17.6	59	13.7	0.0
55 LINCOLN	3	3.9	35	9.4	0.0
56 McDOWELL	9	18.5	23	9.8	0.0
57 MACON	0	0.0	14	10.5	0.0
58 MADISON	4	18.1	11	10.8	0.0
59 MARTIN	3	9.0	16	9.9	0.0
60 MECKLENBURG	72	7.4	347	7.6	0.0
61 MITCHELL	1	6.5	6	7.6	0.0
62 MONTGOMERY	4	9.9	19	10.3	0.0
63 MOORE	7	8.1	42	10.3	0.0
64 NASH	7	6.0	73	12.3	0.0
65 NEW HANOVER	14	7.5	63	6.9	0.0
66 NORTHAMPTON	0	0.0	20	15.4	0.0
67 ONSLOW	26	8.1	138	8.6	0.0
68 ORANGE	10	8.7	45	8.0	0.0
69 PAMlico	1	8.7	5	8.8	0.0
70 PASQUOTANK	8	18.3	33	15.2	0.0
71 PENDER	4	8.8	11	5.1	0.0
72 PERQUIMANS	3	28.3	9	15.6	0.0
73 PERSON	7	16.7	26	12.2	0.0
74 PITTS	24	13.4	118	13.6	0.0
75 POLK	2	13.7	10	12.7	0.0
76 RANDOLPH	9	5.2	54	6.7	0.0
77 RICHMOND	2	3.1	37	11.0	0.0
78 ROBESON	30	15.0	117	12.1	0.0
79 ROCKINGHAM	11	10.2	59	10.4	0.0
80 ROWAN	13	8.4	70	9.3	0.0
81 RUTHERFORD	7	9.1	41	10.4	0.0
82 SAMPSON	7	8.7	36	9.6	0.0
83 SCOTLAND	10	17.7	37	13.3	0.0
84 STANLY	7	10.1	30	8.7	0.0
85 STOKES	4	7.6	26	10.3	0.0
86 SURRY	10	11.0	32	7.5	0.0
87 SWAIN	1	6.4	8	9.7	0.0
88 TRANSYLVANIA	7	27.0	18	12.8	0.0
89 TYRRELL	0	0.0	2	10.4	0.0
90 UNION	15	7.9	69	8.4	0.0
91 VANCE	12	18.5	43	13.4	0.0
92 WAKE	76	8.8	340	8.6	0.0
93 WARREN	1	5.3	9	9.0	0.0
94 WASHINGTON	3	15.8	12	12.3	0.0
95 WATAUGA	1	2.9	16	8.9	0.0
96 WAYNE	22	13.3	76	9.5	0.0
97 WILKES	5	6.6	34	8.7	0.0
98 WILSON	10	9.5	63	12.5	0.0
99 YADKIN	4	9.3	20	9.1	0.0
100 YANCEY	2	10.6	4	4.5	0.0

* Death rates with a small number of deaths in the numerator should be interpreted with caution. SEE TECHNICAL NOTES

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Infant Deaths

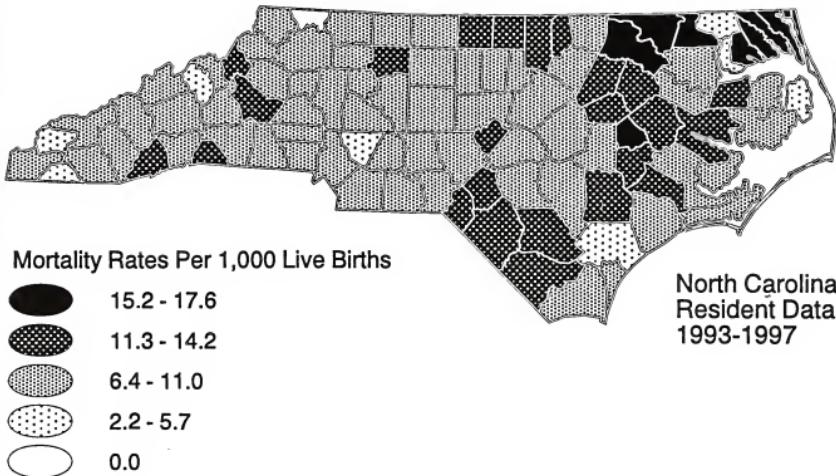


Figure 25

TECHNICAL NOTES

Computation of Death Rates

In this report, general mortality rates are expressed as resident deaths per 1,000 population. All cause-specific death rates are expressed as resident deaths per 100,000 population. All rates in Tables 1-24 use total population in the denominator but rates for the sex-specific cancer sites use male or female population in the denominator. Population bases for these rates were provided by the Office of State Planning in the Governor's Office. The infant mortality rates of Table 25 and Figure 25 are computed as the number of resident deaths under one year of age per 1,000 resident live births.

Deaths in this report are assigned to place of residence. For deaths of people in long-term institutions (mental, penal, old age, orphan, nursing home, rest home, etc.), the institution is considered the usual residence if the decedent lived in the institution at least one year. College students and military personnel are considered residents of the college or military community.

The following definitions apply to the rates of this report:

Unadjusted Annual Death Rate: The annual death rates are computed as resident deaths per 1,000 or 100,000 population. These rates reflect an area's status according to the deaths during the given year.

Unadjusted 5-Year Death Rate: The average annual death rates are computed as average resident deaths per 1,000 or 100,000 average population. These rates give an area's status with respect to the deaths during the 5-year period and are shown in state and county maps (e.g. Figures 5.A, 6.A).

Adjusted 5-Year Death Rate: The average annual age-adjusted rates are computed by the direct method. Also expressed as deaths per 1,000 or 100,000 population, these rates are those that would be expected if the age composition of each county's population were the same as that estimated for the state in 1990. These rates are not affected by age. However, the user should not compare an adjusted death rate to an unadjusted death rate. Also, adjusted rates for different time periods cannot be directly compared unless they were adjusted by the same standard population.

The adjusted rates in the 1990 through 1995 editions of this publication used the 1980 North Carolina population as the standard. Beginning with the 1996 edition, the 1990 North Carolina population was used as the standard. Also, the rates in the 1996 and 1997 editions are age-adjusted whereas rates in previous editions were age-race-sex adjusted (see page 104 for the justification for this change). Therefore, the adjusted rates in the 1996 and 1997 editions are not comparable to those in previous editions. Adjusted rates are depicted in the state and county maps (e.g., Figures 5.B, 6.B). [Note: For the two sex-specific cancer sites (female breast and prostate), rates are adjusted for age and denominators are sex-specific.]

In age-adjusting the death rates in this publication, 10 age groups are used to compute age-specific death rates for each geographic area and cause of death. These rates are then applied to the 1990 North Carolina standard population by age: 0-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85+.

For the maps, a clustering routine* from the Statistical Analysis System (SAS) was used to group counties that are "most like each other" with respect to their unadjusted and their adjusted rate. These maps show five levels of death rates, where level one is the lowest rate interval and level five the highest.

A word of caution: Rates for sex-specific cancers (e.g., prostate) use male or female population in the denominator and therefore are not comparable to other rates. Thus, in ranking the causes of death—for example, in ranking the leading cancer sites—one must use the observed numbers of deaths rather than the rates.

Interpretation of Death Rates

To assess an area's relative mortality conditions during a 5-year period, both the unadjusted and the adjusted rate can be compared to the corresponding state rates for a particular cause of death. This, of course, should not be done if the area's unadjusted rate had fluctuated widely in recent years. The rate should represent a relatively stable situation. Then, the following alternative interpretations will apply:

Relative Status Of		Interpretation of Unadjusted Rate
Unadjusted Rate	Adjusted Rate	
Low	Low	Low mortality is not due to age, other mortality conditions are favorable.
Low	High	Low mortality is due to favorable age distribution, other mortality conditions are unfavorable.
High	Low	High mortality is due to unfavorable age distribution, other mortality conditions are favorable.
High	High	High mortality is not due to age, other mortality conditions are unfavorable.

*In 1983 the State Center for Health Statistics conducted an evaluation of several clustering methods. It was found that the "Average Linkage Method" produced tighter clusters (i.e., clusters with smaller within-cluster variances) than the other methods examined. Consequently, this method is used to cluster county rates in this publication.

In using adjusted rates, it is important that the user understand the reason for adjustment. Example: A and B stand for population subgroups, e.g., older and younger persons or males and females.

COUNTY			STATE			
	Population	Deaths	Population	Deaths	Death Rate*	
Population A	300,000	1,000	333.3	500,000	2,500	500.0
Population B	10,000	10	100.0	800,000	1,000	125.0
Total	310,000	1,010	325.8	1,300,000	3,500	269.2

*Deaths per 100,000 population.

Compared to the state, county subgroups A and B both have lower rates, but the county as a whole (A and B combined) has a higher rate. This seems to be a paradox that results from two factors—different proportions of A and B in the county vs. the state population and wide differences between the rates for A vs. B. In this example, it is true that the county has the higher total rate—BUT ONLY BECAUSE THE POPULATION CONTAINS A HIGH PROPORTION OF SUBGROUP A.

It is important for program planners to know that the county has a high rate relative to the state rate; this information is needed to determine manpower, facility, and related needs. But in assessing "risk," the researcher needs to adjust for confounding factors such as age. To do this, multiply each population-specific county rate by the corresponding "standard" population, sum these results, and divide by the total "standard." In the above example, using the state population as the standard, the computation is:

$$\frac{(1000/300,000 \times 500,000) + (10/10,000 \times 800,000)}{1,300,000} = 0.001897 \text{ or } 189.7 \text{ per } 100,000 \text{ population}$$

Thus, as rates specific for A and B imply, the county's rate is lower than the state's rate after adjustment for the factor represented by A and B.

Caution: In assessing the relative mortality conditions of a county, be particularly aware of rates based on small numbers of deaths since, in such cases, random fluctuation in the rate may render rate comparisons risky. The reader should read very carefully the next section entitled "Caution About Use of Rates."

Caution About Use of Rates

Small Number of Events:

Any death rate with a small number of deaths in the numerator will have substantial random variation over time (a large standard error). A good rule of thumb is that any rate based on fewer than 20 events in the numerator may be subject to serious random error. As such, extreme caution and reservation should be taken when comparing or assessing trends with rates calculated with fewer than 20 events. Many of the death rates in this report have numerators smaller than 20.

Adjusted Death Rates:

Crude death rates are affected by the demographic composition of populations. As such, differences in demographic composition from one geographic area to another or from one point in time to another may hinder comparisons. The standardized adjustment of rates addresses this problem. The adjusted rate is a hypothetical rate computed in a way that reflects what the death rate would be in a particular geographic area, if the geographic area had the same age composition of the standard population. The measure, while useful for comparative purposes across time and geographic area, has no observable or descriptive value in and of itself. The adjusted rate provides opportunities for comparisons across time and geographic area as long as all rates that are to be compared share the same population standard and are adjusted for the same demographic categories.

Small Subpopulations

Adjusted rates in the 1996 and 1997 editions of the *Leading Causes of Death* represent a shift from age-race-sex adjusted rates to age-adjusted rates. This change was made because small age-race-sex populations may produce unstable age-race-sex adjusted rates. One death out of an estimated population of five, for example, would produce a death rate of 20,000 per 100,000 population. If this rate were applied to the appropriate age-race-sex group of the standard population, a very large number of expected deaths would result and the adjusted rate would be extremely high. On the other hand, zero deaths in several population groups may result in a very low age-race-sex adjusted rate.

Counties with a very small minority population, predominantly in western North Carolina, are particularly subject to extreme age-race-sex-adjusted rates (high or low) due to small age-race-sex-specific population groups. For example, in the 1995 *Leading Causes of Death*, Macon County was shown as having a 1991-1995 age-race-sex adjusted death rate for breast cancer of 64.6 compared to the adjusted state rate of 28.3. Further investigation showed that this very high adjusted rate was due to two breast cancer deaths in a very small age 55-64 minority female population group. When the 1991-95 breast cancer death rate was adjusted only for age, the Macon County rate was 30.4 compared to a North Carolina age-adjusted rate (1980 standard) of 25.6. Unusually high or low rates, therefore, may be biased due to small numbers. To eliminate these problems, the 1996 and 1997 editions report only age-adjusted rates. By dividing the deaths and population into 10 age groups rather than 40 age-race-sex groups in order to calculate an adjusted rate, the adjusted rates will be much more stable statistically. Also, age generally has a much stronger impact on mortality than race or sex, and therefore is the most important factor to adjust for.

Since the adjusted rates in these editions would not be comparable to those in earlier editions due to the changes discussed above, we decided to also change to the 1990 North Carolina population as a more contemporary standard so that the size of the unadjusted and adjusted rates would not differ as much.

APPENDICES

APPENDIX A

List of Selected Causes of Death (used for Tables 3 and 4)

CAUSE OF DEATH	ICD-9 CODES*
Diseases of Heart.....	390-398,402,404-429
Cerebrovascular Disease.....	430-438
Atherosclerosis.....	440
Cancer.....	140-208
Lip, Oral Cavity, and Pharynx	140-149
Stomach	151
Colon, Rectum, and Anus	153,154
Liver.....	155
Pancreas	157
Larynx.....	161
Trachea, Bronchus, and Lung.....	162
Malignant Melanoma.....	172
Female Breast.....	174
Cervix Uteri.....	180
Ovary and Other Uterine Adnexa.....	183
Prostate	185
Bladder	188
Brain Tumors.....	191,225,237
Non-Hodgkins Lymphoma.....	200,202
Leukemia.....	204-208
Acquired Immune Deficiency Syndrome.....	042-044
Septicemia.....	038
Diabetes Mellitus	250
Pneumonia and Influenza	480-487
Chronic Obstructive Pulmonary Disease and Allied Conditions.....	490-496
Chronic Liver Disease and Cirrhosis.....	571
Nephritis, Nephrotic Syndrome, and Nephrosis.....	580-589
Unintentional Motor Vehicle Injuries	E810-E825
All Other Unintentional Injuries and Adverse Effects.....	E800-E807,E826-E949
Suicide.....	E950-E959
Homicide.....	E960-E978

*International Classification of Diseases, Ninth Revision.

APPENDIX B

List of 43 Selected Causes of Death*

(used for Table 1)

CAUSE OF DEATH	ICD-9 CODES**
Shigellosis and amoebiasis.....	004,006
Certain other intestinal infections.....	007-009
Tuberculosis.....	010-018
Whooping cough	033
Streptococcal sore throat, scarlatina, and erysipelas.....	034-035
Meningococcal infection.....	036
Septicemia.....	038
Human immunodeficiency virus infection (AIDS).....	042-044
Acute poliomyelitis.....	045
Measles	055
Viral hepatitis.....	070
Syphilis	090-097
All other infectious and parasitic diseases	001-003,005,020-032,037,039-041,046-054,056-066,071-088,098-139
Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues.....	140-208
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature.....	210-239
Diabetes mellitus	250
Nutritional deficiencies	260-269
Anemias.....	280-286
Meningitis	320-322
Diseases of heart	390-398,402,404-429
Hypertension with or without renal disease	401,403
Cerebrovascular disease	430-438
Atherosclerosis	440
Other diseases of arteries, arterioles, and capillaries.....	441-448
Acute bronchitis and bronchiolitis	466
Pneumonia and influenza.....	480-487
Chronic obstructive pulmonary diseases and allied conditions	490-496
Ulcer of stomach and duodenum	531-533
Appendicitis	540-543
Hernia of abdominal cavity and intestinal obstruction without mention of hernia.....	550-553,560
Chronic liver disease and cirrhosis	571
Cholelithiasis and other disorders of gallbladder	574-575
Nephritis, nephrotic syndrome, and nephrosis	580-589
Infections of kidney.....	590
Hyperplasia of prostate	600
Complications of pregnancy, childbirth, and the puerperium	630-676
Congenital anomalies.....	740-759
Certain conditions originating in the perinatal period.....	760-779
Symptoms, signs, and ill-defined conditions	780-799
Injuries and adverse effects	E800-E949
Suicide.....	E950-E959
Homicide and legal intervention	E960-E978
All other external causes	E980-E999

*List developed by the National Center for Health Statistics.

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APPENDIX C

List of 27 Selected Causes of Infant Death* (used for Table 1, Ages <1)

CAUSE OF DEATH	ICD-9 CODES**
Certain intestinal infections .....	.008-009
Whooping cough	033
Meningococcal infection.....	036
Septicemia.....	038
Viral diseases	045-079
Congenital syphilis	090
Remainder of infectious and parasitic diseases001-007,010-032,034-035,037,039-041,080-088,091-139	
Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues.....	140-208
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior and of unspecified nature	210-239
Diseases of thymus gland	254
Cystic fibrosis	277.0
Diseases of blood and blood-forming organs	280-289
Meningitis	320-322
Other diseases of nervous system and sense organs.....	323-389
Acute upper respiratory infections	460-465
Bronchitis and bronchiolitis	466,490-491
Pneumonia and influenza.....	480-487
Remainder of diseases of respiratory system.....	470-478,492-519
Hernia of abdominal cavity and intestinal obstruction without mention of hernia.....	550-553,560
Gastritis, duodenitis, and noninfective enteritis and colitis	535,555-558
Remainder of diseases of digestive system	520-534,536-543,562-579
Congenital anomalies.....	740-759
Certain conditions originating in the perinatal period.....	760-779
Symptoms, signs, and ill-defined conditions.....	780-799
Accidents and adverse effects	E800-E949
Homicide.....	E960-E969
All other causes.....	Residual

*List developed by the National Center for Health Statistics.

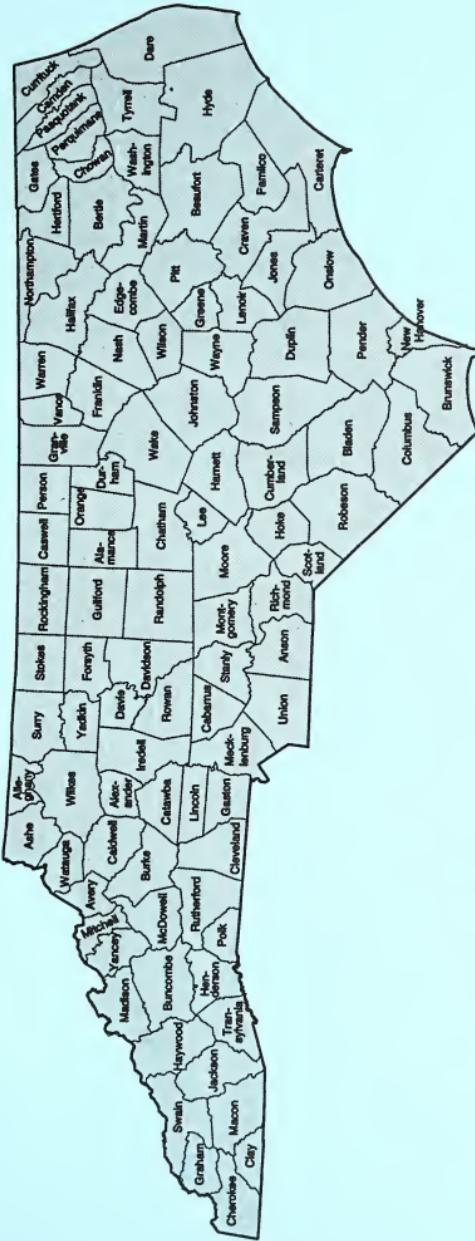
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